



Cloud Service Orchestration (CSO) HTTP API Reference and Developer Guide

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Chapter 1. Introduction

This document is for application developers using Juniper's Cloud Services Orchestration (CSO) APIs to orchestrate processes for developing portals, applications and automations.

The CSO Tenant, Site and Service Manager (TSSM), in concert with with the Network Service Controller (NSC), provide access to a set of HTTP APIs that allows you to make use of much of the same CSO functionality that is available through the GUI. You can use these APIs to automate various tasks, processes and workflows as you design, deploy and monitor the services that you provide for your customers.

In addition, we are providing some concise conceptual information that we think will help you in planning for and moving forward with your implementation.

You can find reference documentation for the available APIs in the 1st section of this guide.

Two categories of CSO APIs exist:

- **Pre-staging APIs.** For use by Cloud administrators and providers to pre-stage their customer implementation and sites. These APIs are used by network service providers to create service offerings.
- **Lifecycle management APIs.** For use by customers, offered to them through their Cloud Services provider portal, to manage the lifecycle of the Network Service that they are purchasing.

1.1. Audience and Purpose

This document is for software developers and system administrators who have had an introduction to CSO and/or NSC including their respective component architectures and who also have some basic knowledge of conventions for using both RESTful APIs and RPC-based HTTP APIs.

In addition to APIs that handle various service orchestration tasks, there are APIs that allow access to some service assurance functionality. To work with the service assurance through the APIs, a basic understanding of message queuing and the the Rabbit MQ message bus is also required.

This document is not intended to give complete and exhaustive information on how to use the CSO APIs. Rather, it is designed to help you get started with accessing the services using the RESTful and HTTP APIs in a controlled environment.

The information given to introduce the API Reference section is organized so that it resembles tutorials, introducing common service orchestration tasks that are useful in managing either a *centralized deployment* or a *distributed deployment*. Often a *centralized deployment* is useful and appropriate for hosting cloud services for use within an enterprise, while a *distributed deployment* lends itself to use when hosting cloud services for resellers and other customers. It is possible to blend the two for a hybridized deployment.

You are welcome to go through this information, choose the subset of functionality that most interests you, and test its use. We think that by doing so, you will be in a good position to understand how to plan for and manage your deployment.

1.2. Architectural Overview

CSO uses modular components and is made available through distributed microservices that use both RESTful (CRUD) and HTTP RPC/json requests.

1.2.1. Modular Components and Hierarchical Communication

Microservices are available as HTTP APIs to facilitate:

- Life cycle management of Network Services to the customer.
- Intra-service communication between individual microservices.

CSO architecture is also hierarchical, with Central and Regional Management that allows your CSP-based (Cloud Services Platform based) solution to scale over large numbers of network elements (VNF/PNF/Devices/Services), across multiple geographical regions.

1.2.2. REST and RPC Over HTTP

Because some complex operations don't easily lend themselves to strict RESTful (CRUD) conventions, the CSO HTTP APIs are available through endpoints to which you can send HTTP requests that map all complex operations to:

- REST CRUD.
- or--
- RPC over HTTP.

When creating your requests:

- For each operation that maps to CRUD, the parent parameter is usually a meaningful name.
- For each operation that maps to RPC, the request is always a POST, and the json object that you construct for the request body must have "input" as root.
- Each response that corresponds to a request that maps to RPC begins with the parent parameter "output".

The requests for creating and importing POPs, onboarding tenants, and creating service instances require that you assemble data into properly-formatted json files for the body (payload) of each request.

The following example request illustrates the pattern of an RPC request and its response:

```
POST /device-connectivity/disconnect-device
```

body:

```
{
  "input" : {
    "connectionid" : "string",
    "deviceid" : "string",
    "webhook" : {
      "url" : "string"
    }
  }
}
```

response:


```
{
  "output" : {
    "requestid" : "string"
  }
}
```

1.3. Requirements

This section outlines requirements for implementing CSO for use through the HTTP interfaces.

For a complete description of requirements for this application, please refer to the Cloud CPE installation and deployment guides.

1.3.1. General Requirements

Hardware

- Default hard disk capacity of each VM is 500G when it is provisioned using provision vm tool, however if the VMs are provisioned using other hypervisors then recommended minimum hard disk size is 200G for each VM.
- All machines should have FQDN set correctly (hostname -f)

Operating Systems

- All physical machines where Kvm VMs are provisioned should have Ubuntu 14.04 LTS (Base Ubuntu) or 14.04.01 LTS.
- For all CSP components, Ubuntu 14.04.2 LTS OS.

Virtual Machines

- Refer to the deployment guide for VM specifications and information on provisioning the VM with the recommended configuration.
- All VMs should have Internet access.

Keystone Authentication

- Pre-installed Contrail Cloud with use of Keystone Admin Token is required for vCPE deployment.

Network

- All the machines are reachable from each other.
- The installer tool must run in the same subnet as the target machines.
- Network machines (routers) are already configured per any specifications related to customizations (customizations are beyond the scope of this document).
- All target machines are in same subnet.



You must run all the operations/installations as **root** user—run the installer tool with root privileges on the installer machine. If you are not using 'provision_vm.sh' where csp components are deployed, ensure that you are using Ubuntu 14.04.2 LTS OS ('provision_vm.sh' automatically provisions the Ubuntu 14.04.2 LTS OS).



Ensure that the DNS server configuration on all nodes are accurate. Otherwise, downloading external packages from the Internet will fail.

1.3.2. Requirements for Typical HA (High availability) Environments

HA Test Environment

- 2 Physical servers and 8 virtual machines including single node Space are required for deploying all the services in central and regional areas.
- 3 VMs are used for each region, one for infrastructure components, and two for micro-services deployment on Kubernetes (which will be deployed on VM).
- 1 VM used for installer VM
- 9 IPs including 1 VIP for space web GUI are required for this installation.

Table 1. Requirements for test environment

Components	VM	CPU(Cores)/Memory(GB)
Central Infrastructure services	csp-central-infravm	4/48GB
Central Microservices	csp-central-msvm1	6/48G
Central Microservices	csp-central-msvm2	6/48G
Regional Infrastructure services	csp-regional-infravm	4/48GB
Regional Microservices	csp-regional-msvm1	6/48GB
Regional Microservices	csp-regional-msvm2	6/48GB
Space VM	csp-space-vm	4/32GB
Installer VM	csp-installer-vm	4/32GB

HA Production environment

- 4 physical servers, 4 Virtual Machines including a single node space, are required for deploying all the services in central and regional areas.
- "csp-installer-vm" is must for production environment, download the installer in this server and do all deployment activities from this VM.
- Infrastructure components will be deployed on VM and micro-services deployment on Kubernetes. Kubernetes will be deployed on physical server.
- 5 IPs including 1 VIP for Space web GUI are required for this installation.

Table 2. Requirements for production environment

Components	VM	CPU(Cores)/Memory(GB)
Installer VM	csp-installer-vm	4/32G
Central Infrastructure services	csp-central-infravm	16/32G
Central Microservices	csp-central-ms1	8/48G (Min requirement)

Components	VM	CPU(Cores)/Memory(GB)
Central Microservices	csp-central-ms2	8/48G (Min requirement)
Regional Infrastructure services	csp-regional-infravm	16/32G
Regional Microservices	csp-regional-ms1	8/48G (Min requirement)
Regional Microservices	csp-regional-ms2	8/48G (Min requirement)
Space VM	csp-space-vm	4/32G

1.3.3. Requirements for Typical Non-HA Deployments

While typical deployments require HA, you have the option of setting up a non-HA environment. Often non-HA environments are set up for development and for demonstrations.

Non-HA Development and Demonstration Environments

- 1 physical server and 4 virtual machines including single node space are required for deploying all the services central and regional location.
- 1 VM are used for each region, both infrastructure components and micro-services deployment on the same vm.
- 5 IPs including one VIP for Space web GUI are required for this installation.

Table 3. Requirements for non-HA (development and demonstration) environments

Components	VM	CPU(Cores)/Memory(GB)
Central services	csp-central-vm	6/64G
Regional services	csp-regional-vm	6/64G
Space VM	csp-space-vm	4/32G
Installer VM	csp-installer-vm	4/32G

VM Test Environments

- 6 Virtual Machines including single node space are required for deploying all the services in central and regional regions
- 2 VM's are used for each region, one for infrastructure components and another for micro-services deployment on Kubernetes. Kubernetes will be deployed on VM.
- 7 IPs including 1 VIP for Space web GUI are required for this installation.

Table 4. Requirements for non-HA test environments

Components	VM	CPU(Cores)/Memory(GB)
Central Infrastructure services	csp-central-infravm	4/32G
Central Microservices	csp-central-msvm	4/48G
Regional Infrastructure services	csp-regional-infravm	4/32G
Regional Microservices	csp-regional-msvm	4/48G
Space VM	csp-space-vm	4/32G
Installer VM	csp-installer-vm	4/32G

VM Production Environments

To or deploy all services for both central and outlying regions:

- 2 physical servers, three virtual machines and a single node space.
- **csp-installer-vm**, installed centrally.
- 1 Physical server and 1 VM is required on each region, infrastructure components will be deployed on VM and micro-services deployed on Kubernetes.
- 7 IPs including 1 VIP for Space web GUI are required for this installation.



Download the installer for **csp-installer-vm** in its server and perform all deployment activities from this VM.



Kubernetes will be deployed on a physical server.

Table 5. Requirements for non-HA production environments

Components	VM	CPU(Cores)/Memory(GB)
Installer VM	csp-installer-vm	4/32G
Central Infrastructure services	csp-central-infravm	16/32G
Central Microservices	csp-central-ms	8/48G (Min requirement)
Regional Infrastructure services	csp-regional-infravm	16/32G
Regional Microservices	csp-regional-ms	8/48G (Min requirement)
Space VM	csp-space-vm	4/32G

1.3.4. Obtain Authentication

A valid authentication token is required for use of any and all CSO HTTP APIs. Lists of prerequisites for various types of install and deployment scenarios are mentioned above.

For authentication ensure that you observe the following:

- CSO should be installed and accessible from the client machine.
- You should have valid user credentials for access to Openstack's Keystone (as used during your CSO installation).

CSO makes use of Openstack's Keystone authentication service. A valid authentication request to the Keystone service returns a value for *X-Auth-Token* that you must include in the headers for all subsequent requests along with a value for *Content-Type* as in the following table:

Key	Value
Content-Type	application/json
X-Auth-Token	Token



Please check your keystone setting for the time interval during which the token is valid, to ensure that its value is appropriate for your purposes. Keystone allows you to change this value.

The following diagram illustrates typical interactions between Keystone and microservices that you might be

using:

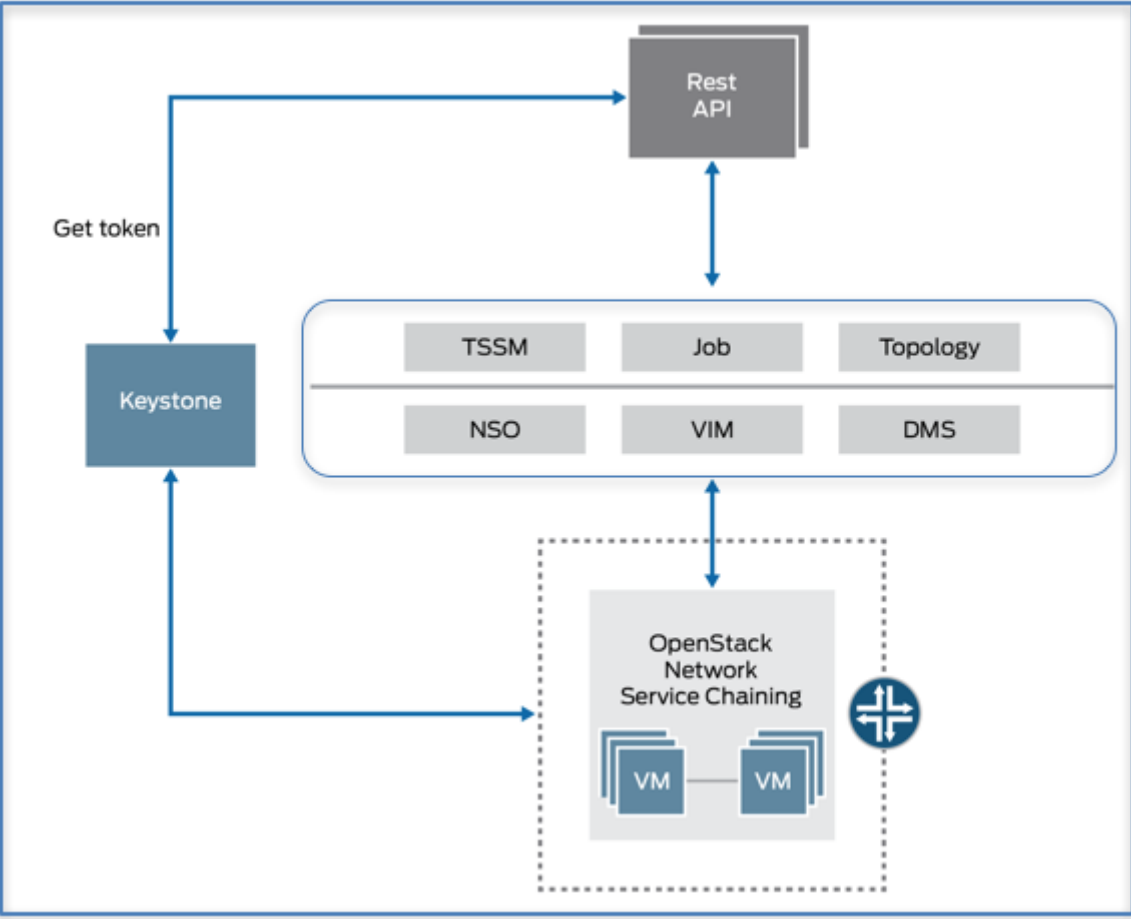


Figure 1. Interaction

It is possible to customize the interactions between Keystone and the microservices.

Use Keystone to Authenticate

Each CSO HTTP request must contain valid authentication in the form of an auth token.

To obtain an auth token, send a POST request to:

```
http://<ip-address-of-Keystone-service>:5000/v3/auth/tokens
```

With following key-value pair in the header:

Key	Value
Content-Type	application/json

And with the following json code with valid values for name and password (as obtained during installation) in the request body:

```

{
  "auth": {
    "scope": {
      "project": {
        "domain": {
          "id": "<domain-id>"
        },
        "name": "<name>"
      }
    },
    "identity": {
      "password": {
        "user": {
          "domain": {
            "id": "<domain-id>"
          },
          "password": "<password>",
          "name": "<name>"
        }
      }
    },
    "methods": [
      "password"
    ]
  }
}

```

A successful authentication request results in a response containing a response header with an alphanumeric value for the parameter 'X-Subject-Token:' for use in headers, to authenticate subsequent requests, until the token expires.



To change the value for token duration, use the setting in Keystone.

Authentication for POPs

In the admin portal:

1. Using the admin portal to create a POP with the assigned name of **CNAME-DC**.
2. Onboard the VIM instance in the POP with one or more service profiles and set the default service profile.
3. Create two external tenants **instance1** and **instance2** for **CNAME-DC** in NSO/VIM. This creates the required projects in CSP central keystone. Each tenant will have a service profile reference that is specific to the VIM instance.

NOTE: When you are sharing keystone, this mapping is not required and you don't have to set the service profile name in the *mapping__required__container* parameter within the tenant json.

4. Log into the Admin portal as a user with name **cname_admin** and create a tenant site (like **tenantname_admin**) with an admin user .

NOTE: The service profile name to be used for each tenant can be set per VIM, or it can be the same across

all VIMs. The user can select one of the service profiles which has been created in step 1 above. The UI populates the list of service profiles added in the onboard-POP page into the tenant creation page.

In the SCP Portal:

When **instance1-admin** logs into SCP, gets an auth-token from CSO keystone, and passes it to TSSM for creating network service/vlinks, then:

- TSSM sends the token to NSO along with the specified API (create/delete network service/vlink).
- NSO uses the **auth_token** and retrieves the **instance1** tenant name from the IAM/CSP central keystone.
- NSO constructs the service instance input with the caller context details like the following **create_ctxt** example and sends it to VIM.
- VIM makes use of the **project_id** parameter in the caller context to retrieve the tenant record for that **project_id**.
- If mapping is required for the tenant record, then the VIM discovers whether there are any associated service profiles, and if so, it gets the infra tenant details from the vim-instance. Else the VIM uses the **auth_token** given in **create_ctxt** and creates the network service.

```
"create_ctxt": {
  "requester_url":
"amqp://203.0.113.0:5672?queue=test1697&routing_key=89391&exchange=rm-cm.csp-vim",
  "username": "tenantname-admin",
  "project_id": "tenantname",
  "auth_token": "$ABCDEF123456",
  "domain_name": "default",
  "auth_url": "http://203.0.113.0.131:5000/v3/",
  "api_key": "v3"
},
```

1.3.5. Installing licenses

Installing licenses using APIs is a multi-step process that can be done using either the central or regional microservices host at central or regional IP addresses:

- central-ms-ip-address—IP
- regional-ms-ip-address—IP

Obtain a Device UUID

You need to obtain device identifiers to use APIs for license operations like the following:

- Installing a license on a single device.
- Efficiently installing licenses on multiple devices.
- Verifying successful installations of licenses on devices.

Obtaining the device UUID requires the retrieval of several other UUIDs.

To obtain a device UUID, perform the following steps while recording the IDs contained in each response for later use:

Step 1: Send an HTTP GET request (with AUTH token) to the following endpoint to get the network service UUID, as in the following example:

```
http://<central-ms-ip-address>/tssm/nfv-service-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

The operation returns information about the network service, including its UUID, which is labeled *nfv_nsid*:

```
"nfv_nsid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
```

You use the network service UUID (*nfv_nsid*) value to obtain the VNF UUID.

Step 2: Get the VNF UUID for the network service by sending an HTTP GET request (with an AUTH token) to the following endpoint to get a list of VNF instances:

```
http://<centralms-ip-address>/restconf/data/maestro/nfv-instances/vnf-instance
```

The response contains the network service UUID and the **vnfm-id** value like the following:

```
"parent_ns": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"vnfm-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
```

Step 3: Obtain the device UUID by sending a an HTTP GET request (with an AUTH token) appended with the **vnfm-id** value to the *vnf-instance* endpoint like the following:

```
http://<centralms-ip-address>/restconf/data/maestro/nf-instances/vnf-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

The response contains information about the device, including the device GUID, which is the value to use for the **vnf-id**, as in the following example:

```
"family": "juniper-srx",
"state": "active",
"vnf-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
"vnfd-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
```

① device id

Step 4: Using the values that you obtained, organize the required input data into a json-formatted object to use as the body of a request for installing a license. The following example illustrates a json-formatted object for installing a license on a single device:


```
{
  "input" : {
    "license_id": "JUNOS,00001"
    "file_url":
"/v1/AUTH_cafbcfa238a84a9b8ef177154a3c55a3/iamcentral/license.txt",
    "device_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "component_name": "JUNOS"
  }
}
```

Installing a License on a Single Device

Step 1: Open the license file and look for the license identifier, which precedes the serial number.

In the example below, the license identifier is JUNOS00001.

```
JUNOS00001aeaqic agajb4 fu6eie fq4ojr g4ztaq jqgazd...
```

Step 2: Send an HTTP GET request (with AUTH token) to the following endpoint to get the **file_url** value:

```
http://<centralms-ip-address>/<ems-central>/image/uuid
```

where **centralms-ip-address**—IP is the address of the central microservices host and **uuid** is the identifier that is used as the license file name, which is a hashed GUID value that looks like *6e3dbdf0-0741-4592-9b89-07fa88434615*.

The response contains information about the image, including the **file_uri** value, like the following:

```
"uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"image_type": "SRX_LICENSE_FILE",
"file_uri":
"/v1/AUTH_349b6e5e29e448c98ffc20901036e54d/iamcentral/license.txt", "description":
"vsrx license upload",
```

Step 3: Obtain the device UUID and the component name (which is JUNOS for all Juniper devices).

Step 4: Send an HTTP POST request (with AUTH token) to the following endpoint at the centralms-address of the central microservices:

```
http://<centralms-ip-address>/<dms-central>/install_license_single_device
```

with json-formatted data like the following:

```
{
  "input" : {
    "license_id": "JUNOS,00001"
    "file_url": "/v1/AUTH_$ABCDEFG1234567/iamcentral/license.txt",
    "device_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "component_name": "JUNOS"
  }
}
```

The license is installed on all devices.

Installing a License on All Devices

To install a license on all devices, send an HTTP POST request with an AUTH token to the following endpoint:

```
http://<centralms-ip-address>/<dms-central>/install_license_all_devices
```

Where *centralms-ip-address*—IP is the address of the central microservices server.

The license is installed on all devices.

Verify the Device License

The regional server associated with each device stores information about installation of any license on that device. To verify installation of any license, send an HTTP request to the regional microservices host.

To verify a license, send an HTTP GET request (with an AUTH token) for the for the **device UUID**, to the following endpoint:

```
http://<regional-ms-ip-address>/<ems-regional>/device/device_uuid
```

The response includes the status of any license, like the following example:

```
"license_info": {
  "license": [
    {
      "license_id": "JUNOS00001",
      "install_status": success
    }
  ]
}
```

For additional details, see [Obtain a Device UUID](#).

1.4. Deployment

When setting up and managing deployments using the CSO APIs, your emphasis will likely be on either a

centralized or a distributed architecture. You might also find that a hybridized deployment fits your needs.

1.4.1. Centralized and Distributed Deployment

CSO deployments can be centralized, distributed, or hybrid.

Centralized deployments are especially appropriate for enterprise use in situations where information use is, in general, separated by geographic regions. A centralized CSO server communicates with physical devices or VNF through its regional servers.

Distributed deployments handle service orchestration using the Network Service Controller (NSC). The NSC is a distributed domain controller that manages CPE devices at multiple locations for a customer enterprise. With the NSC APIs, you can develop applications that manage distributed enterprise domains through interfaces that provide software designed networking (SDN) controller functions for NFX platform orchestration.

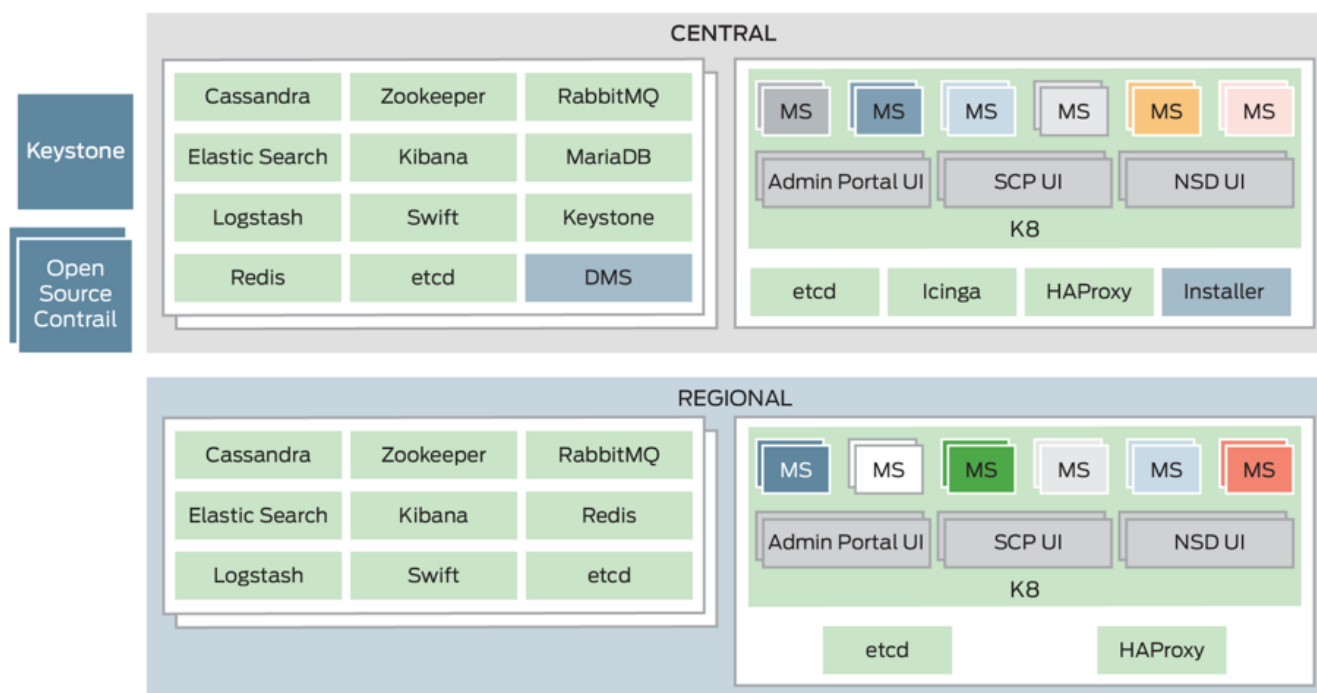


Figure 2. Deployment architecture

1.4.2. Topologies

The following figure shows a deployment topology for centralized CSO that includes:

- A Regional CSO server
- A Central CSO Server



Please refer to the CSO Deployment Guide for detailed information that you can use for resources planning that meets your specific deployment needs.

1.4.3. Regional Managers

- Each Regional Manager manages a different shard of the network elements, and is typically deployed geographically close to the entities that it manages.
- Each Regional Manager along with its Central Manager will typically have its own Database system(s) for storing data models, instead of having one database cluster spanning across all regions.

- The Regional Manager typically maintains a per-device data model, with the result that separate devices run config, config backups, raw FM/PM/Telemetry data, and other functions.
- Regional Managers typically encapsulate complexities involved in multi-vendor support.

1.4.4. Central Managers

- A Central Manager typically maintains high-level abstract data model for the network elements, resources, topology, and services across regions.
- A Central Manager also serves as intelligent proxy to distribute/scatter requests to regional managers and aggregate/gather results from regional managers.

The following diagram gives an overview of how service offerings can be modeled for a set of customers:

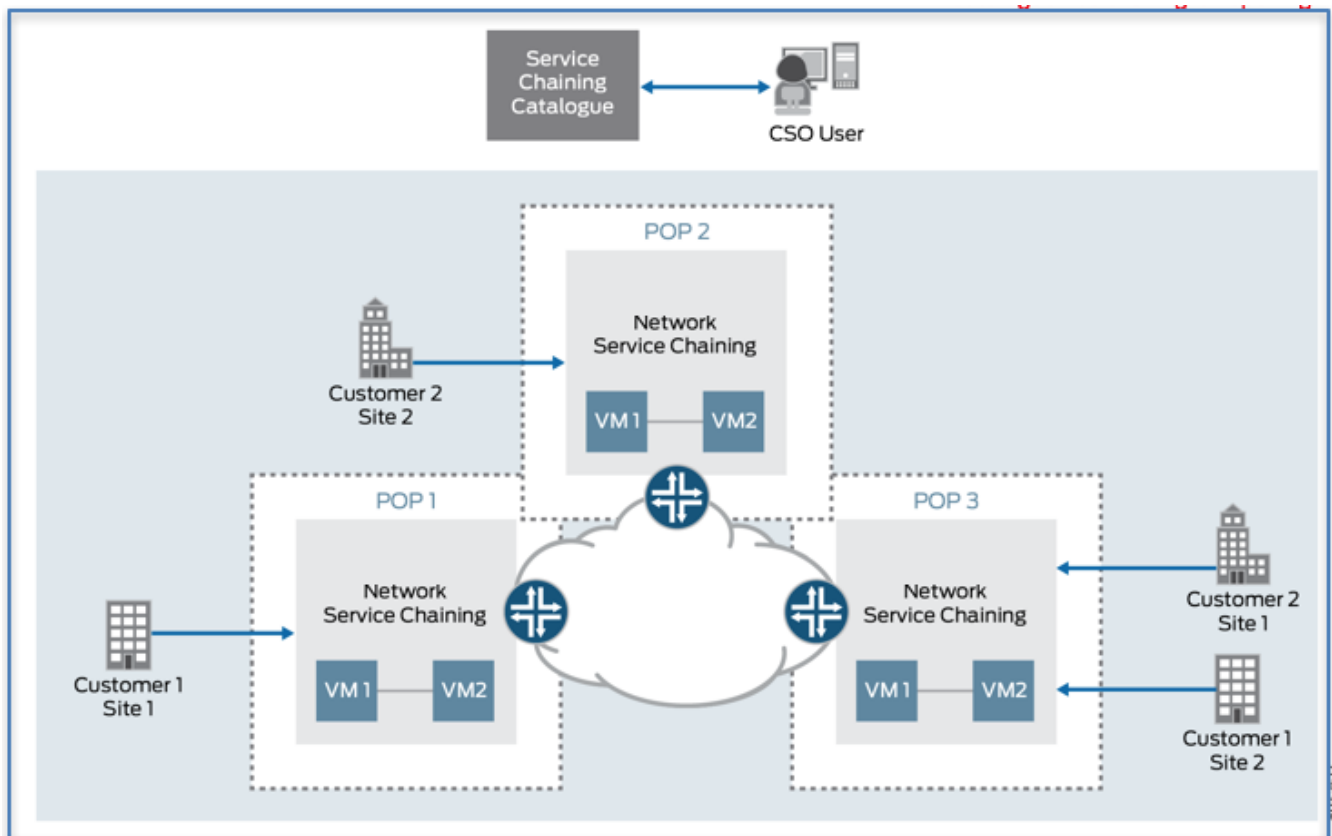


Figure 3. High level networking architecture

The following table lists microservices that are relevant for enabling network services:

Table 6. Microservices for enabling network services

Microservice	Description	Integration required?
Tenant, site, and service mgmt (TSSM)	Handles customers (tenants), and sites for customers and the services associated with them.	Y
Network Service orchestration (NSO)	Provides abstraction for turning the logical service abstraction into physical and/or virtual services	N
Virtual Infrastructure Manager(VIM)	Using Hypervisor, manages lifecycle of the virtual functions that comprise the service	N

Microservice	Description	Integration required?
Device management Service(DMS)	Includes connectivity, configuration and other services for both Virtual and physical network	N
Job Management Service (Job)	Manages the lifecycles of long-running jobs	Y
Topology	Handles the topology by storing information on physical and virtual elements for nodes, links and services for user groups	Y



The third column indicates whether the microservice integration is required for orchestration.

1.5. Workflow Overview

CSO allows you to tailor your implementation to your needs and to the needs of your customers. This means that details of your workflow can vary widely, however the kinds of tasks that you will perform and the associated APIs do fall into categories.

Following is a table that lists the kinds of tasks that you will perform over the lifetime of your implementations, and the URL prefixes for the associated services:

Table 7. List of tasks and associated URLs

Services	URL prefix
Authentication	<keystone-ip>:port/<version>/auth/tokens
Import point(s) of presence (POP) in CSO.	topology-service
Onboard tenants (customers) on to CSO.	tssm
Associate onboarded customers to service profile.	tssm
Create and make changes to service instances.	tssm
Start, stop, and manage services.	tssm
Discover and configure added physical network function(s) (PNF)	topology-service
Remove sites and services.	tssm
Remove POPs.	topology-service



The Keystone version that you should use depends on your environment.



Talk to CSO support engineers about details of your service profile.

The following diagram illustrates a simplified workflow:

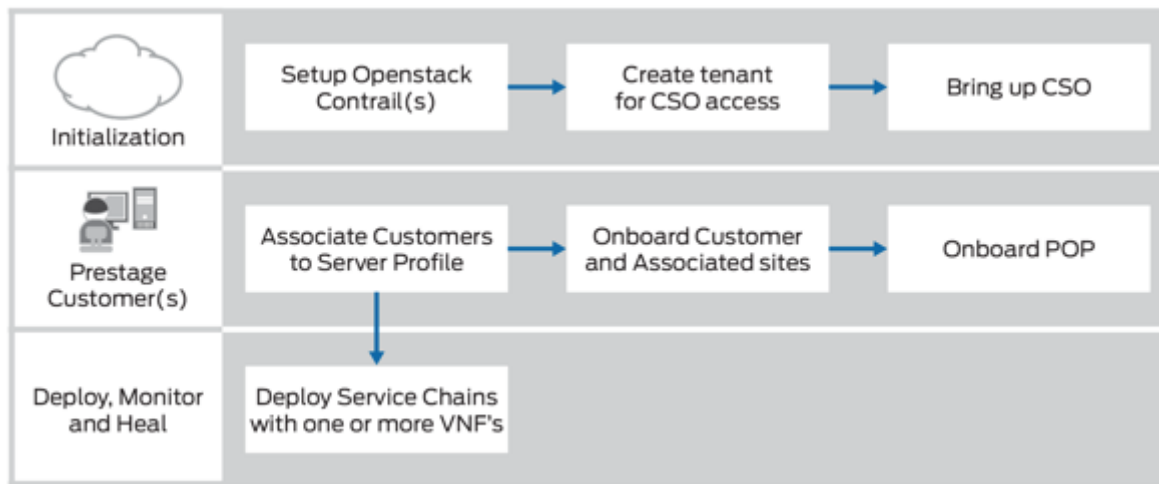


Figure 4. Workflow overview



Both Openstack and CSO use the concept of a tenant, here **Onboard customer** has the same meaning as **Onboard tenant**.

1.6. Sending Requests

Send all requests to the HA Proxy IP address of the central server, which is labeled CSO in the following diagram:

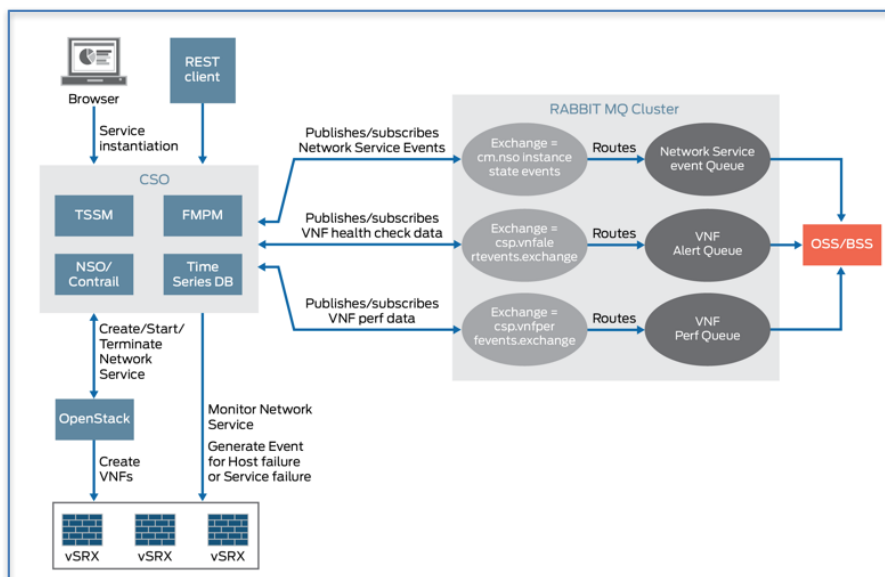


Figure 5. Service Assurance Architecture

The request URLs use the following pattern:

```
/<csp-ms-vm>/<module/object>
```

The HTTP headers all must contain an auth token obtained using the procedure in [Use Keystone to Authenticate](#) along with the value `application/json` for the parameter content-type:

- "X-AUTH-TOKEN: token_value"
- "content-type: application/json"



Most REST requests will contain a json-formatted payload as the body of the request.

1.7. Under the Covers of Microservice APIs

The CSO HTTP APIs are generated from a YANG model that enables descriptions of the available resources and functionality.

1.7.1. YANG Components

Each YANG file shown above can be broken down into two sections:

- Resources : objects
- RPC : actions

Example Microservice YANG

Understanding the structure of YANG modeling files is helpful in understanding how to use the APIs.

We are providing following example, using "bank" as the module (object), to illustrate the YANG file structure that is typical for CSO microservices.

When using the CSO APIs, you won't be using or accessing the YANG files directly. You will, however, be working with json-formatted responses and sending json-formatted request bodies with corresponding structures.

```
module bank {  
    yang-version 1;  
    namespace "http://www.juniper.net/ns/bank";  
    prefix "bank";  
  
    import csp-common { prefix "csp"; }  
  
    import ietf-yang-types {  
        prefix yang;  
    }  
  
    organization "Juniper Networks";  
    description "bank";  
    revision 2015-05-25 {  
        description "Initial version";  
    }  
  
    list account {  
        uses csp:entity;  
        csp:vertex;  
        key name;  
        leaf balance {  
            type uint32;  
        }  
    }  
}
```

```

    leaf first-name {
        type string;
    }
    leaf last-name {
        type string;
    }
    leaf age {
        type uint32;
    }
    leaf gender {
        type enumeration {
            enum M;
            enum F;
        }
    }
    list phone {
        csp:has-edge;
        key uuid;

        leaf uuid {
            type leafref {
                path "../.../phone/uuid";
            }
        }
    }

    list user {
        csp:ref-edge;
        key uuid;

        leaf uuid {
            type leafref {
                path "../.../user/uuid";
            }
        }
    }

    container credit {
        uses credit-info;
    }
}

grouping credit-info {
    leaf credit_name {type string;}
    leaf credit_score {type uint32;}
    leaf current_credit_cards {type uint32;}
    anyxml data {

```



```

        description "test";
    }
}

list user {
    description "This is a list of users in the system.";
    uses csp:entity;

    ordered-by user;
    config true;
    key "name";

    leaf user-type {
        type string;
    }
    leaf full-name {
        type string;
    }
}

rpc transfer {
    description "Synchronize service instance with JSM";
    input {

        leaf accountid {
            type yang:uuid;
        }

        leaf amount {
            type uint32;
        }

        container schedule {
            leaf date {type string;}
            leaf bydate {type string;}
            leaf recurring {type boolean;}
        }
    }
    output {
        leaf status {
            type enumeration {
                enum success;
                //transfer is successfull
                enum incomplete_funds;
                //not enough funds for transfer
                enum overdraft;
                //overdraft
            }
        }
    }
}

```

```

    }
  }
}

rpc deposit {
  description "deposit credit to account";
  input {
    leaf accountid {
      type yang:uuid;
    }
    leaf amount {
      type uint32;
    }
  }

  output {
    leaf status {
      type string;
    }
    leaf transactionid {
      type yang:uuid;
    }
    leaf current_balance {
      type uint32;
    }
  }
}
}
}

```

1.7.2. Get Component Information

When you send a valid GET request (with auth token) to either of the following CSO services, the response contains all of the connected items of the type specified:

- tssm: Tenant, Site, and Service Management
- topology-service: Topology Services

URI	Description
/tssm/customer	Lists all customers in the system.
/tssm/site	Lists all sites in the system.
/tssm/nfv-service-profile	Lists all service profiles in the system.
/tssm/nfv-service-instance	Lists all service instances in the system.
/topology-service/pop	Lists all pops on-boarded by the provider.

Sample Response

```
{
  "customer": [
    {
      "fq_name": ["default-domain", "Customer-VJ", "Customer-VJ"],
      "uuid": "dc3ffc30-1b16-479d-959e-86a0ac9fc9bc",
      "uri": "/tssm/customer/dc3ffc30-1b16-479d-959e-86a0ac9fc9bc"
    }
  ],
  "total": 1
}
```

Get Item Information

When you have a unique object identifier, you can get information on that specific object. Using either of the requests in the following table results in the response that follows:

URI	Description
/tssm/customer/dc3ffc30-1b16-479d-959e-86a0ac9fc9bc	Get customer details associated with the specified UID.
/tssm/customer?fq_name_str=default-domain:Customer-VJ: Customer-VJ	Get customer details associated with a specified, fully qualified name.

```

{
  "customer": {
    "tenant_type": "small",
    "parent_uuid": "88f5fb2d-7dd7-412c-afa4-0b1a1ef980ef",
    "parent_type": "project",
    "tenantid": "88f5fb2d7dd7412cafa40b1a1ef980ef",
    "tenant_existed": "created",
    "display_name": "Customer-VJ",
    "name": "Customer-VJ",
    "fq_name": [
      "default-domain",
      "Customer-VJ",
      "Customer-VJ"
    ],
    "uuid": "dc3ffc30-1b16-479d-959e-86a0ac9fc9bc",
    "vpn_id": "6f880de0-930a-43f7-aeb1-5bd03a37da8d",
    "uri": "/tssm/customer/dc3ffc30-1b16-479d-959e-86a0ac9fc9bc",
    "networks": {
      "network": [
        {
          "network_name": "Customer-VJ-l3vpn_l3vpn",
          "vpn_id": "6f880de0-930a-43f7-aeb1-5bd03a37da8d"
        }
      ]
    },
    "deployment_scenario": "managed_wan",
    "parent_uri": "/tssm/project/88f5fb2d-7dd7-412c-afa4-0b1a1ef980ef"
  }
}

```

Chapter 2. Centralized Service Orchestration

Centralized deployments are especially appropriate for enterprise use in situations where information use is, in general, separated by geographic regions.

A centralized CSO server can only communicate with physical devices or VNF through its regional servers. For example, a centralized server can request regional service to control physical resources (devices) managed by CSO. Physical devices should be located within geographic regions in proximity to the bulk of the networking traffic that they handle. Each physical device can be used and controlled by regional servers that are creating and using VNF (virtual network functions).

CSO uses component architecture and implements a workflow that integrates with Contrail and Openstack APIs. The following diagram illustrates the types of tasks that you will be performing while using a centralized deployment.



Figure 6. Workflow detail



Each request requires a valid auth token obtained using **Openstack Keystone** service. For instructions on obtaining an auth token, see the section [Use Keystone to Authenticate](#).

2.1. Import a Point of Presence (POP)

To import a POP in CSO, you create a json-formatted object that contains the all the needed information, and use it for the payload of your REST request (see the example below).

2.1.1. POP Object Model

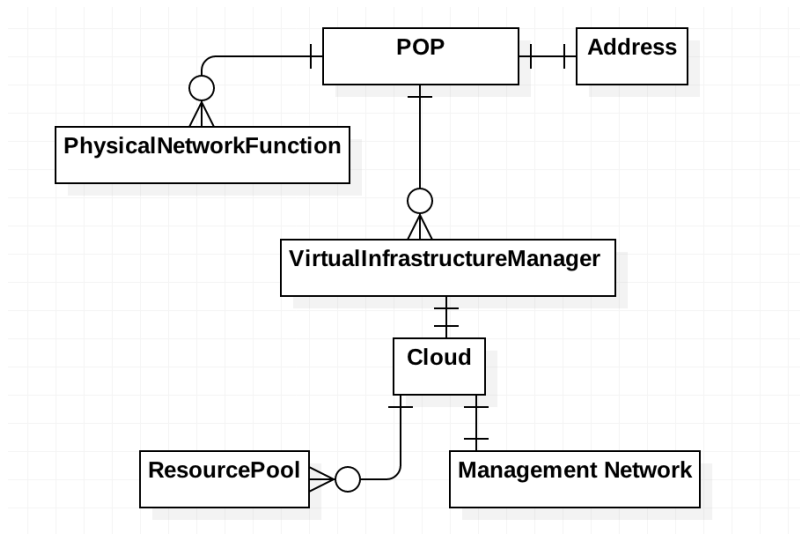


Figure 7. POP object model

2.1.2. Import a New POP:

Send a POST request to your CSO server:

```
/<csp-ms-vm>/topology-service/import-pop
```

With the following HTTP headers:

- "X-AUTH-TOKEN: token_value"
- "content-type: application/json"

and with json code in the payload that describes the POP that you are importing. The following json example illustrates data needed for importing both vim and pnf and contains a few comments describing key items:

```

{
  "input": {
    "job_name_prefix": "import_pop",
    "pop": [
      {
        "dc_name": "regional",
        "name": "pop-ems",
        "address": {
          "street": "street",
          "city": "city",
          "state": "CA",
          "zip_code": "XXXXX",

```

```

        "country": "USA"
    },
    "vim": [
        {
            "name": "vim-ems",
            "vim_type": "cloud",
            "cloud": {
                "address": "XX.XXX.XX.XX",
                "auth_url": "http://XX.XXX.XX.XX:5000/v3",
                "default_domain": "Default",
                "password": "pwd",
                "default_tenant": "admin",
                "username": "name",
                "resource_pool": [
                    {
                        "name": " SFO-AZ ",
                        "compute_zone": " SFO-AZ "
                    }
                ]
            },
            "mgmt_network": {
                "vld_name": "mgmt",
                "vl_name": "mgmt-net",
                "onboard": true,
                "route_target": ["8887:887"],
                "subnet": ["XX.XXX.XX.XX/23"]
            }
        }
    ],
    "device": [
        {
            "name": "pnf-ems",
            "device_ip": "XX.XXX.XX.XX",
            "pnf_package": "juniper-mx",
            "assigned_device_profile": "SDN-GW-MX",
            "authentication": {
                "password_based": {
                    "username": "root",
                    "password": "pwd"
                }
            }
        }
    ]
}

```

}

Parameters for Onboarding POPs

The following table contains a list of parameters for use in onboarding POPs.

Table 8. Parameters for onboarding POPs

Parameter	Req'd?	Datatype	Description
dc_name:	Y	String	Specify the type of POP; regional—POP that serves a specific geographic region or central—Central POP that serves all regions
name	Y	String	Specify the name of the POP.
address	Y		Identifies the object type.
street	Y	String	Specify the street location of the POP.
city	Y	String	Specify the name of the city.
state	Y	String	Specify the state of POP location.
zip_code	Y	String	Specify the country's zip code or postal code.
country	Y	String	Specify the country
coordinates	N		
latitude	N	String	Latitude
longitude	N	String	Longitude
name	Y	String	Specify the name of the VIM instance. You can use any number of alphanumeric characters, including special characters.
vim_type	Y	enum	Specify VIM type of "cloud" or "uCPE", default is cloud
cloud	N		Identifies the object type.
address	Y	String	Specify the IP address of the primary Contrail Configure and Control node for the Contrail Cloud Reference Architecture (CCRA) for this POP.
auth_url	Y	String	Specify the uniform resource indicator (URI) for the OpenStack Keystone. The default is <a href="http://<keystone-ip-address>:5000/">http://<keystone-ip-address>:5000/
default_domain	Y	String	Specify the name of the OpenStack domain that you configured.
password	Y	String	Specify the OpenStack Keystone password that you configured.
default_tenant	Y	String	Specify the name of the OpenStack tenant that you configured.
username	Y	String	Specify the OpenStack Keystone username that you configured (Specify the IP address of the primary Contrail Configure and Control node for the Contrail Cloud Reference Architecture (CCRA) for this POP.). For example, admin.
resource_pool	Y	String	Specify a resource pool for each VIM.

Parameter	Req'd?	Datatype	Description
name	Y	String	Specify name of resource pool that is configured on Contrail Control and Configure node?)
compute_zone	Y	String	Specify the availability zone in Contrail OpenStack in which the VMs for network services reside.
mgmt_network	Y	String	Container for management network for the VIM
vld_name	Y	String	Name of virtual link descriptor for Mgmt network
vl_name	Y	String	Name of management network in contrail
onboard	Y	boolean	true: import named virtual network object from VIM
route_target	Y	String	Specify route target for Contrail mgmt network
subnet	Y	String	Specify one or more prefixes that define the subnets for the Contrail Compute nodes. You can use an IPv4 address.
device	N		Provider edge device for the POP
name	Y	String	Specify the device name such as a physical network element (PNE) for a centralized deployment. You can use any number of alphanumeric characters, including special characters.
device_ip	Y	Ipaddress	Specify the management IP address of the device.
pnf_package	N	String	Name of package providing metadata and config templates needed to program a PNF device for service chain attachments (in the case of vCSO)
assigned_device_profile	Y	String	Name of the device profile assigned to this device
authentication	Y		Specify auth type; default is password_based
password_based	N	String	Auth mechanism.
username	Y	String	Specify the username for logging into the device.
password	Y	String	Specify the password for logging into the device.

2.2. Onboard a Tenant

After importing the POP that you will use for your new tenant, you can then onboard one or more tenant(s). A POP can have multiple tenants, and a tenant can also have more than one POP.

2.2.1. Tenant Object Model

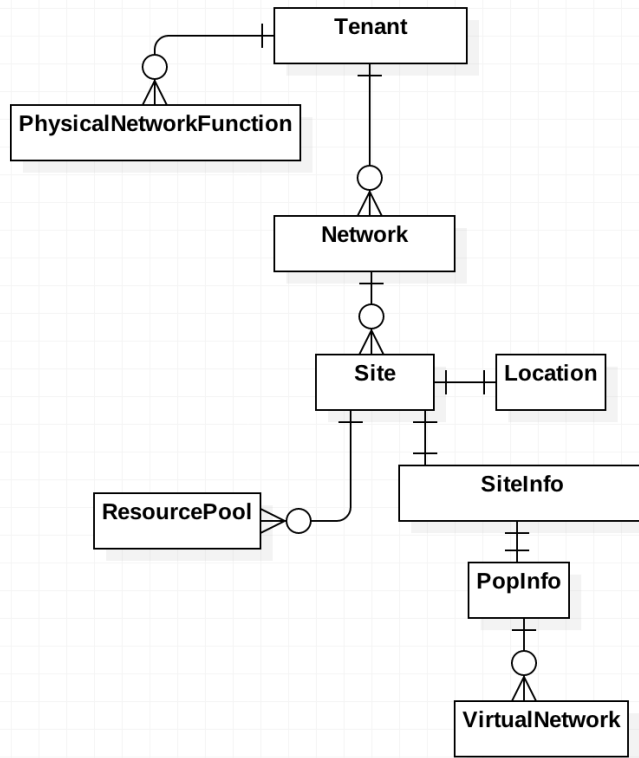


Figure 8. Tenant object model

2.2.2. Parameters for Onboarding a Tenant

The following table contains a list of parameters for use in onboarding tenants. The json-formatted model is available for additional details in the Data model chapter.

Table 9. Parameters for onboarding tenants

Parameter	Req'd?	Datatype	Description
tenant_name	Y	String	Specify the type of POP, regional POP that serves a specific geographic region or central POP that serves all regions
tenant_admin	N	String	Administrator for the tenant
admin_user_name	Y	String	Specify user name of administrator
admin_user_password	Y	String	Specify password of administrator
tenant_type	Y	enum	Specify "default" "small" "medium" "large", or "xlarge"; If not provided, small is assigned
managed_wan_topology	Y	String	Managed Wan topology
network	Y	String	Tenant network.
network_name	Y	String	Name of the customer L3VPN network
site	Y	String	List of site details
site_name	Y	String	Specify name of the site
site_description	N	String	Specify description of the site and additional information about that site
location	Y	String	Location

Parameter	Req'd?	Datatype	Description
street	Y	String	Specify the street location of the POP.
city	Y	String	Specify the name of the city.
state	Y	String	Specify the state of POP location.
zip_code	Y	String	Specify the country's zip code or postal code.
country	Y	String	Specify the country
cloud_site_info		String	Left VPN Site details
assigned_vim	N	String	Name of assigned vim in nso. Optional. If not specified, the first assigned_resource_pool
assigned_resource_pool	N	String	Name of the assigned resource pool in nso. Saved as respool_id in topology site properties
pop_info	Y	String	Information on POP
pop_name	Y	String	Specify name of pop managing the site
route_target	Y	String	Specify route target of the left of the service chain
left_virtual_networks	Y	String	Specify site name of the right network. A special name "INTERNET" is used for internet breakout
right_network_name	Y	String	Right corresponding network (the data_center site name of the right network. A special name "INTERNET" is used for Internet breakout)
data_center_site_info	Y	String	One and only one site per tenant
pop_name	Y	String	Specify name of pop for the site
route_target	Y	String	Specify route target for corporate data center network. New Vlink with route-target and subnet is created and saved as corp_transit_net_id in topology site properties
subnet	Y	String	Specify subnets of corporate data center network
internet_info	N	String	Information on Internet for parent object
route_target	Y	String	route target for Internet network
subnet	Y	String	list of subnet ipv4 address for Internet network
vl_name	Y	String	name of virtual language
onboard	N	boolean	false by default; true: import named virtual network object from VIM; false: create a virtual network in VIM with the specified name. In both cases link VIM object to entry in local database object with the same name.
wan_link_type	N	String	Type of WAN link that is being specified
tunnel_type	N	String	Tunnel type that is being specified

2.2.3. Onboard a Tenant

Send a POST request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/onboard-tenant
```

with json code in the body that describes one or more tenant(s). Each tenant needs two json objects—one for tenant identification and one for topology type—and, optionally, additional child json objects describing tenant sites, as needed.

HTTP headers:

Key	Value
Content-Type	application/json
X-Auth-Token	Token

The following json example illustrates data needed in the request payload:

```
{ "input":
  {
    "tenant_name" : "N20",
    "tenant_admin" : {
      "admin_user_name" : "N20_admin",
      "admin_user_password" : "pwd"
    },
    "tenant_type" : "default",
    "managed_wan_topology": {
      "network": [
        {
          "network_name": "N20-l3vpn",
          "site": [
            {
              "site_name" : "N20-site-1",
              "site_description" : "vCSO payload ",
              "location" : {
                "street": "600 Epic Way",
                "city": "San Jose",
                "state": "CA",
                "zip_code": "95134",
                "country" : "USA"
              },
              "cloud_site_info" :{
                "pop_info" : {
                  "pop_name" : "pop-ems",
                  "route_target" : "65412:778",
                  "left_virtual_networks": [
                    {
                      "right_network_name": "INTERNET",
                      "subnet": ["xx.xxx.xx.xx/24"]
                    }
                  ]
                }
              }
            }
          ]
        }
      ]
    }
  }
}
```

```

        {
            "right_network_name": "N20-corp-site",
            "subnet": ["xx.xxx.xx.xx/24"]
        }

    ],

    },
    "internet_info": {
        "route_target" : "65412:776",
        "subnet": ["xx.xxx.xx.xx/24"]
    }
}
},
{
    "site_name" : "N20-site-2",
    "site_description" : "vCSO payload ",
    "location" : {
        "street": "180 Elm Ct",
        "city": "Sunnyvale",
        "state": "CA",
        "zip_code": "94086",
        "country" : "USA"
    },
    "cloud_site_info" :{
        "pop_info" : {
            "pop_name" : "pop-ems",
            "route_target" : "65412:779",
            "left_virtual_networks": [
                { "right_network_name": "INTERNET", "subnet":
["xx.xxx.xx.xx/24"]}
            ]
        },
        "internet_info": {
            "route_target" : "65412:776",
            "subnet": ["xx.xxx.xx.xx/24"]
        }
    }
},
{
    "site_name" : "N20-corp-site",
    "site_description" : "vCSO payload ",
    "location" : {
        "street": "701 1st Ave",
        "city": "Sunnyvale",
        "state": "CA",
        "zip_code": "94086",

```

```

        "country" : "USA"
    },
    "data_center_site_info" :{
        "pop_name" : "pop-ems",
        "route_target" : "65412:772",
        "subnet": ["xx.xxx.xx.xx/24"],
        "internet_info": {
            "route_target" : "65412:776",
            "subnet": ["xx.xxx.xx.xx/24"]
        }
    }
}
]
}
]
}
}

```

Response:

```

{
  "output":
  {
    "status": "in-progress",
    "jobid": "<job-id>"
  }
}

```

Onboard a Tenant While specifying WAN Links

WAN-link tssm onboard-tenant

Send a POST request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/onboard-tenant
```

Example payload:

```

{
  "input":
  {
    "tenant_name" : "Pepsi",
    "tenant_type" : "small",
    "tenant_admin" : {
      "admin_user_name" : "pepsiadmin",
      "admin_user_password" : "passw0rd"
    }
  }
}

```

```

    },
    "properties": {"property": [{"name": "ucpe_prop1", "value": "ucpe_val1"}, {
"name": "ucpe_prop2", "value": "ucpe_v2"}]},
    "managed_wan_topology": {
        "network": [
            {
                "network_name": "ucpe-tenant_l3vpn",
                "site": [
                    {
                        "site_name" : "Pepsi-site-15",
                        "site_description" : "UCPE payload",
                        "properties": {"property": [{"name": "ucpe_prop1", "value"
: "ucpe_val1"}, {"name": "ucpe_prop2", "value": "ucpe_v2"}]},
                        "location" : {
                            "street": "site1 street",
                            "city": "site1 ciity",
                            "state": "site1 state",
                            "zip_code": "99990",
                            "country" : "some country"
                        },
                        "device_template_name": "NFX_deployment_option_1",
                        "on_premise_site_info" : {
"cp_e_as_number" : "65003",
                            "access_info" : {
                                "router_name" : "pe_ip_sec",
                                "router_as_number" : "65000",
                                "oam_traffic": {
                                    "ip_prefix": "xx.xx.x.x/28",
                                    "gateway_ip": "xx.xx.x.x.125",
                                    "vlan_id": 15
                                }
                            },
                            "wan_traffic" : [
                                {
                                    "wan_link_name": "WAN_0_randomName", ①
"wan_link_type": "MPLS", -> enum [MPLS, Internet]
"tunnel_type": "NONE", -> enum [NONE, IPSEC]
"local_interface": "ge-0/0/3" -> if not given , always defaults to "ge-0/0/3"
                                    "vlan_id": 10,
                                    "local_ip_prefix": "xx.xx.x.x/24",
                                    "remote_ip_prefix": "xx.xx.x.x/24"
                                },
                                {
                                    "wan_link_name": "WAN_1_randomName", ②
"wan_link_type": "Internet", -> enum [MPLS, Internet]
"tunnel_type": "IPSEC", -> enum [NONE, IPSEC]
"local_interface": "ge-0/0/1" -> if not given , always defaults to "ge-0/0/3"
                                    "vrf_name": "VRF1",

```


Obj/field name	Description
nfv_service_profile	Identifier for network service profile in TSSM like XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX.
name	Specify the name of the service instance, which The field has no limit on the number of characters and accepts letters, numbers, and symbols. For example, test-service-instance.
fq_name	Specify the fully qualified name of the site at which you activate the service, including the domain, name of the project, name of the customer and name of the site; "default-domain" "test-customer" "test-customer" "test-service-instance"
pending_config_input	Object to contain VNF config specifications that will be applied
vnf_config	Specify the configuration for the VNF. The fields that you specify depend on the VNF and the specific function.
function_config	Specify the configuration for a function within the VNF.
functionid	Specify the function in the VNF: NAT Network Address Translation
adv_config_variables	Specify the configuration settings for the function.
fw_policy_info	Specify values for the firewall policy.
src_zone	Select the security zone from which packets originate: left—Interface that transmits data to the host., or right—interface to which the host transmits data
dst_zone	Select the security zone to which packets are delivered
dst_ips	Specify the destination IP address prefixes that the network service uses as match criteria for outgoing traffic; any—Match any source IP address of packets, or ipp—Match a specific prefix in the source IP address for which the application enforces the policy. For example: ipp 192.0.2.0/24
apps	Specify the applications to which the policy applies: "junos-tcp-any", "junos-udp-any" "junos-ftp", "junos-http", " junos-https", "junos-icmp-all", "junos-icmp-ping", " junos-telnet", "junos-tftp"
policy_name	Specify the name of the rule. The field has no limit on the number of characters and accepts letters, numbers, and symbols. For example, policy-1
src_ips	Specify the source address prefixes that the network service uses as match criteria for incoming traffic; "any"—Match any source IP address of packets, "ipp"—Match a specific prefix in the source IP address for which the application enforces the policy. For example: ipp 192.0.2.0/24
action	Specify the action for the policy; "Permit"—Transmit packets that match the rule or "Deny"—Drop packets that match the rule
base_config_variables	Object to specify configuration settings for the VMs that host the VNF. These fields are different for different VNFs.
ntp_servers	Specify the fully qualified domain names (FQDNs) or IP addresses of one or more NTP servers
name_servers	Specify the fully qualified domain names (FQDNs) or IP addresses of one or more DNS name servers. For example, 192.0.2.35.
hostname	Specify the hostname of the VM that contains the VNF. For example, test-hostname.
left_interface	Specify the identifier of the VM interface that receives data. For example, ge-0/0/0.
right_interface	Specify the identifier of the VM interface that transmits data. For example, ge-0/0/0.
vnf-id	Specify the identifier of the VNF. For example, vff.
nfv-service-instance	Object to identify service instance UUID

Obj/field name	Description
uuid	Identifier for the network service instance in TSSM. like XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXXXX.

2.3.1. Get Lists of Tenants and UUIDs

To perform updates and changes to existing tenants (customers), you must obtain the customer UUID.

Send a GET request (with auth token) to your CSO server:

```
//<csp-ms-vm>/tssm/customer
```

The response contains a list of all existing customers' names and their associated UUIDs.

Response:

```
{
  "href": "http://<csp-ms-vm>/tssm/customer/d1ebc753-24a8-445a-bc4b-e51a296f6c87",
  "fq_name": [
    "default-domain",
    "Tenant_VJ",
    "Tenant_VJ"
  ],
  "uuid": "d1ebc753-24a8-445a-bc4b-e51a296f6c87"
}
```

2.3.2. Import a Service Profile

Send a POST request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/import-service-profile
```

The response contains a confirmation like the following:

```
{
  "input": {
    "nsdid": "<nsd-id>",
    "name": "Service-Site-Package"
  }
}
```

2.3.3. Attach a Service Profile to a Tenant

After importing a service profile, you can associate the service profile with a tenant.



This is the last step before the service orchestration can be deployed.

Send a PUT request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/customer/<customer-uuid>
```

```
{
  "customer": {
    "fq_name": [
      "default-domain",
      "vcpe-customer ",
      "vcpe-customer "
    ],
    "nfv_service_profile_refs": [
      {
        "to": [
          "default-domain",
          "Service-Site-Package"
        ],
        "uuid": "<service-profile-uuid>",
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid-1>"
      },
      {
        "to": [
          "default-domain",
          "Service-Site-Package-Update"
        ],
        "uuid": "<service-profile-uuid>",
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid-2>"
      }
    ]
  }
}
```



The above transaction creates a reference between a customer and two service profiles. Your system is now staged for Network Service Creation.

2.3.4. Attach a Service Profile Using Ref-update

Send a POST request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/ref-update
```

with a json object as the request body that identifies the update type as **customer**, the ref-type

nfv_service_profile identifies the UUID with a value of **ADD** for **operation** as in the following example:

Input:

```
{
  "type": "customer",
  "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "ref-type": "nfv_service_profile",
  "ref-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "operation": "ADD"
}
```

After receiving a success response, you can then verify the listing of service profiles attached to a customer using the following POST request:

```
/<csp-ms-vm>/tssm/get-service-profiles
```

with a valid customer ID like the following example:

```
{
  "input": {
    "customerid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

A successful response will contain information like the following:

```
{
  "output": [
    {
      "href": "http://0.0.0.0:8082/tssm/nfv-service-profile/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "fq_name": [
        "default-domain",
        "csrFW-srxNAT"
      ],
      "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
    }
  ]
}
```

2.3.5. View NSD Packages and VNFD Configuration

Send a GET request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/get-nsd-package-details
```

HTTP headers:

- "X-AUTH-TOKEN: token_value"
- "content-type: application/json"

This returns the existing NSD package, along with associated VNFD packages and configuration templates. Initial configuration is often performed using the product user interface, and the templates that have been created can then be used as a starting point for new nfv-service-instance objects.

Creating new instances involves editing a service instance json file (you can start by using base and advanced config templates) so that it contains the both the required and optional variables that you need as follows:

- base config variables and advanced config variables.
- pending config field that will be used in nfv-service-instance (see the next section).
- instantiation variables including subnets, route targets, and network IDs.

2.3.6. Create a New Service Instance

For each tenant you can create multiple service instances.

Send a POST request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/nfv-service-instance
```

with json code in the body that describes the tenant.

The following json example illustrates data needed and contains comments describing key items:

```
{
  "nfv-service-instance": {
    "display_name": "vSRX_Firewall", ①
    "parent_type": "customer",
    "config_input": { ②
      "ns_instantiation_variables": {

        "mgmt-net-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ③
        "left-net-rt": "8868:2711", ④
        "left-subnet-cidr": "xx.xx.x.x/24", ⑤
        "right-net-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" ⑥
      }
    },
    "app_point": { ⑦
      "app_point_type": "site-internet",
      "app_point_path": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" ⑧
    },
  },
}
```

```

"pending_attributes": {
    "flavour": "Gold",
    "nfv_service_profile": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
},
"name": "service-site-vCSO-instance ",
"fq_name": [
    "default-domain",
    " vCSO-customer ",
    " vCSO-customer ",
    "service-site-vCSO-instance "
],
"pending_config_input": {
    "vnf_config": [{
        "base_config_variables": {
            "ntp_servers": [
                "1.1.1.1",
                "2.2.2.2"
            ],
            "name_servers": [
                "5.6.7.8",
                "3.4.5.6"
            ],
            "hostname": "HOSTNAME-FW",
            "left_interface": "ge-0/0/1",
            "right_interface": "ge-0/0/2"
        },
        "function_config": [{
            "functionid": "NAT",
            "adv_config_variables": {
                "fw_policy_info": {
                    "src_zone": "left",
                    "dst_zone": "right",
                    "dst_ips": [
                        "any"
                    ],
                    "apps": [
                        "junos-tcp-any",
                        "junos-icmp-ping"
                    ],
                    "policy_name": "left-to-right",
                    "src_ips": [
                        "any"
                    ],
                    "action": "permit"
                }
            }
        ]
    }
}

```

```

        },
        "vnfid": "vFF" ⑩
    }
}
}
}

```

- ① Optional display name (any string, can use spaces), with parent_type hardcoded to "customer."
- ② In config_input, only the ns_instantiation clause is needed. The ns_instantiation_variables object contains required variables used during instantiation-and-start RPC, along with fields depend upon nfv-service-profile.customized_model.app_point_type.
- ③ Mgmt network UUID, obtained from import-pop.
- ④ Left network route target, obtained from tenant onboarding.
- ⑤ Left network subnet, obtained from tenant onboarding.
- ⑥ Right network UUID, obtained from tenant onboarding.
- ⑦ A value for app_point is required, along with a value to app_point_type, which can be one of "site-internet", "site-vpn", "customer-internet", or "ucpe."
- ⑧ TSSM site UUID where this service is to be instantiated.
- ⑨ Required, hard-code to "Gold."
- ⑩ UUID of referenced service profile.
- ⑪ Value for "name" is optional name and defaults to last field in fqname, which is required, while the associated domain should be hardcoded to "default-domain," to which you can add as many tenant names as needed, typically by site name (each value can be any string of any length).
- ⑫ A value for pending_config_input is required; Base config variables are needed during service instantiation and they vary by service.
- ⑬ Required, dictated by reference to NSO, config_template_nfv-service-profile.customized_model.base_config_variables.
- ⑭ Advanced config needed when starting the service—varies by service.
- ⑮ Required fields dictated by nfv-service-profile.customized_model.adv_config_variablereference to NSO config_template.
- ⑯ VNF ID referenced in the nfv-service-profile customized_model.

Response

A successful response contains a json-formatted body similar to the following:

```
{
  "nfv-service-instance": {
    "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", // tssm-nfv-service-instance-
    uuid
    "fq_name": [
      "default-domain",
      " vCSO-customer ",
      " vCSO-customer ",
      " service-site-vCSO-instance "
    ],
    "parent_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "uri": "/tssm/nfv-service-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "parent_uri": "/tssm/customer/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "name": " service-site-vCSO-instance"
  }
}
```



Save the UUID contained in this response. It will be needed for administering the service instance.

2.3.7. Get Service Context

While a service instance is active, you can check the service context. If a PNF plugin exists, associated details are included.

Send a POST request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/get-service-context
```

with the service uuid in the json-formatted body like the following:

```
{
  "input": {
    "service_instance_uuid": "<nfv-service-instance-uuid>"
  }
}
```

The response contains all service-instance details, corresponding site and customer property values, and, if they exist, any associated pnf details.

2.3.8. Get a vSRX Config Template

Send a POST request to the following endpoint:


```
/tssm/get-nsd-package-details
```

with a payload in the body like the following:

```
{
  "input": {
    "service_profileid": <profileuuid>
  }
}
```

2.4. Instantiate, Start, Modify and Monitor

You can control and monitor your network services using REST requests.

2.4.1. Instantiate and Start a Network Service in One Step

Send a POST request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/service-instantiate-and-start
```

and with the UUID of the service instance like the following:

```
{
  "input": {
    "instance_uuid": "<tssm-nfv-service-instance-uuid>" ①
  }
}
```

① uuid of the service instance

Response

A successful response includes the jobid as in the following:

```
{
  "output": {
    "jobid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

2.4.2. Instantiate a Service After Publishing

If you are instantiating a network service after publishing a service profile from NSD tool, you need to do so in two steps:

1. Onboard nfv-service-instance (this returns the instance_uuid for the service after it is created).
2. Use the above instance UUID to instantiate the network service.

This post maps to an RPC.

Send a POST request like the following:

```
<central-ms-ip>/tssm/nfv-service-instance
```

with appropriate configuration information like the following:

```
{
  "nfv-service-instance": {
    "app_point": {
      "app_point_path": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
      "app_point_type": "site-internet" ②
    },
    "display_name": "easy_vpn", ③
    "fq_name": ["default-domain", "customername", "customername",
"instancename"], ④
    "name": "easy_vpn", ⑤
    "parent_type": "customer", ⑥
    "pending_attributes": {
      "flavour": "Gold", ⑦
      "nfv_service_profile": "b06db71a-2dd0-46f5-a49b-513a3cdec16d" ⑧
    },
    "pending_config_input": {
      "vnf_config": [{
        "base_config_variables": { ⑨
          "name_servers": ["2.2.2.2"],
          "ntp_servers": ["3.3.3.3"],
          "enable_default_screens": false,
          "allowed_prefix_list": {},
          "hostname": "firewall-vsrx",
          "left_interface": "ge-0/0/0", ⑩
          "time_zone": "UTC",
          "enable_re_filter": false,
          "loopback_addr": "1.1.1.1",
          "syslog_servers": ["4.4.4.4"],
          "right_interface": "ge-0/0/1" ⑪
        },
        "function_config": [{
          "adv_config_variables": { ⑫
            "fw_policy_info": [{
              "policy_name": "sdssdf", ⑬
              "src_zone": "left", ⑭
            }
          ]
        }
      ]
    }
  ]
}
```

```

        "dst_zone": "right", ⑮
        "source_address": {
            "any": [null]
        },
        "destination_address": {
            "any": [null]
        },
        "action": "permit",
        "application": {
            "any": [null]
        }
    }
  }],
  "functionid": "Firewall" ⑯
}],
"vnfid": "vSRX_Firewall" ⑰
    }
  },
  "state": "none" ⑱
}
}

```

- ① Site UUID (RPC: GET \~/tssm/site.
- ② other options are site-vpn, customer-internet.
- ③ Can be anything – just internal reference doesn't show in SCP.
- ④ Name anything.
- ⑤ should be same as display_name – just internal reference doesn't show in SCP.
- ⑥ Keep-is, do not change.
- ⑦ Keep as-is, do not change.
- ⑧ Service profile UUID (RPC: GET \~/tssm/nfv-service-profile).
- ⑨ VNF Base Configuration.
- ⑩ Keep as-is.
- ⑪ Keep as-is.
- ⑫ VNF adv/Service Configurations.
- ⑬ Can be any name.
- ⑭ Keep as-is.
- ⑮ Keep as-is.
- ⑯ Firewall or NAT or UTM or DPI [RPC: GET \~/restconf/data/maestro/catalog/vnfd-package]
- ⑰ vSRX_Firewall or vSRX_NAT etc [RPC: GET \~/restconf/data/maestro/catalog/nsd-package]
- ⑱ Keep as-is.

This RPC-based POST returns the instance_uuid, which you use in the next step in the body of your next request:

```
/<central-ms-ip>/tssm/service-instantiate-and-start
```

with the instance uuid like the following example:

```
{"input":{"instance_uuid":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"}}
```

2.4.3. Modify Service Instance for Service-configure

Send a PUT request (with auth token) to your CSO server:

```
/<csp-ms-vm>/tssm/nfv-service-instance
```

with json code in the body that contains the configuration information that you need for your implementation, as in the following example:

```
{
  "nfv-service-instance": {
    "display_name": "vSRX_Firewall",
    "parent_type": "customer",
    "nfv_service_profile_refs": [
      {
        "to": [
          "default-domain",
          "Service-Site-Package"
        ],
        "uuid": "<service-profile-uuid>",
        "attr": null,
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid>"
      }
    ],
    "config_input": {
      "ns_start_variables": {},
      "ns_instantiation_variables": {}
    },
    "flavour": "Gold",
    "app_point": {
      "app_point_type": "site-internet",
      "app_point_path": "<tssm-site-uuid>"
    },
    "pending_attributes": {
      "flavour": "Gold",
      "nfv_service_profile": "<service-profile-uuid>"
    },
    "name": "service-site-vCSO-instance ",
  }
}
```

```

"fq_name": [
  "default-domain",
  " vCSO-customer ",
  " vCSO-customer ",
  "service-site-vCSO-instance "
],
"pending_config_input": {
  "vnf_config": [
    {
      "function_config": [
        {
          "functionid": "NAT",
          "adv_config_variables": {
            "fw_policy_info": [
              {
                "src_zone": "left",
                "dst_zone": "right",
                "dst_ips": [
                  "any"
                ],
                "apps": [
                  "junos-tcp-any",
                  "junos-icmp-ping"
                ],
                "policy_name": "left-to-right",
                "src_ips": [
                  "any"
                ],
                "action": "reject"
              }
            ]
          }
        }
      ]
    }
  ],
  "base_config_variables": {
    "ntp_servers": [
      "1.1.1.1",
      "2.2.2.2",
      "3.3.3.3"
    ],
    "name_servers": [
      "192.168.5.68",
      "172.17.28.101"
    ],
    "hostname": "HOSTNAME-FW",
    "left_interface": "ge-0/0/1",
    "right_interface": "ge-0/0/2"
  }
}

```

```

    },
    "vnfid": "vFF"
  }
]
},
"pending_final_props": {}
}
}

```

2.4.4. Update and enable vSRX on a UCPE Site

This updates topology-service site property.

Send a PUT request to

```
/topology-service/site/<topologySiteId>
```

with a payload like the following example:

```

{
  "site": {
    "parent_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "parent_type": "customer",
    "perms2": {
      "owner": "67ff53f9189b4cbeacce91c3b8e631a6",
      "owner_access": 7,
      "global_access": 0,
      "share": []
    },
    "site_type": "on_premise",
    "display_name": "Juniper-site-11",
    "device_template_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "properties": {
      "property": [
        {
          "name": "ucpe_prop1",
          "value": "ucpe_val1"
        },
        {
          "name": "ucpe_prop2",
          "value": "ucpe_v2"
        }
      ]
    },
    "ipam_scope": {
      "oam_pool": {

```

```

    "ip_prefix": "10.102.127.48/28",
    "default_gw": "10.102.127.62",
    "scope_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "ipam_pool_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "ipam_chunkid": null,
    "vlan_id": 15
  },
  "ip_pool": null
},
"name": "Juniper-site-11",
"fq_name": [
  "default-domain",
  "Juniper",
  "Juniper",
  "Juniper-site-11"
],
"uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"topology_site_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"uri": "/topology-service/site/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"state": "activated",
"id_perms": {
  "enable": true,
  "uuid": {
    "uuid_mslong": 16694107303053709031,
    "uuid_lslong": 9799521569891014278
  },
},
"created": "2016-10-06T18:02:06.398021",
"description": null,
"creator": null,
"user_visible": true,
"last_modified": "2016-10-06T18:15:28.512109",
"permissions": {
  "owner": "cspadmin",
  "owner_access": 7,
  "other_access": 7,
  "group": "_member_",
  "group_access": 7
}
},
"parent_uri": "/topology-service/customer/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
}
}

```

2.4.5. Change Configuration Using Service-instance

The following example illustrates a two-step process that changes a service instance from **permit** to **deny**.

1. Send a PUT request to the service-instance uuid:

```
<central-ms-ip>/tssm/nfv-service-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXXX ①
```

① nfv-service-instance uuid

with details in the json-formatted body as in the following:

```
{
  "nfv-service-instance": {
    "pending_config_input": {
      "vnf_config": [{
        "function_config": [{
          "adv_config_variables": {
            "fw_policy_info": [{
              "src_zone": "left",
              "policy_name": "policy1",
              "application": {
                "any": [null]
              },
              "dst_zone": "right",
              "action": "deny",
              "destination_address": {
                "any": [null]
              },
              "source_address": {
                "any": [null]
              }
            }, {
              "policy_name": "policy2",
              "src_zone": "left",
              "dst_zone": "right",
              "source_address": {
                "any": [null]
              },
              "destination_address": {
                "any": [null]
              },
              "action": "deny",
              "application": {
                "any": [null]
              }
            }
          ]
        }, {
          "functionid": "Firewall"
        }
      ]},
      "base_config_variables": {
```



```

        "allowed_prefix_list": {},
        "syslog_servers": ["4.4.4.4", "6.6.6.6"],
        "left_interface": "ge-0/0/0",
        "ntp_servers": ["3.3.3.3", "5.5.5.5"],
        "loopback_addr": "1.1.1.1",
        "hostname": "firewall-vsrx",
        "time_zone": "UTC",
        "enable_default_screens": false,
        "enable_re_filter": false,
        "name_servers": ["2.2.2.2", "7.7.7.7"],
        "right_interface": "ge-0/0/1"
    },
    "vnfid": "vSRX_Firewall"
}]
}
}
}

```

1. Send a POST to:

```
<central-ms-ip>/tssm/service-configure
```

with the service-instance uuid indicated in the body as in the following example:

```
{"input":{"instance_uuid":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"}} ①
```

① nfv-service-instance uuid

2.4.6. Monitor a Long-running Job

Send a GET request (with auth token) to your CSO server:

```
/<csp-ms-vm>/job-service/job/<job-id>
```

The response contains information about the job, including start time, domain, job id, type, and other data, like the following:

```
{
  "job":
  {
    "status": "success",
    "start_time": 1471656407,
    "job_type": "csp.tssm_onboard",
    "results": "complete",
    "name": "onboard_walgreen101_csp.tssm_onboard_1471656407.25",
    "fq_name": ["default-domain",
                "default-project",
                "onboard_walgreen101_csp.tssm_onboard_1471656407.25"
               ],
    "uuid": "<job-id>",
    "uri": "/job-service/job/<job-id>"
  }
}
```



Polling a job to completion and status success indicates desirable outcome.

2.4.7. Import Images Into the Image Management Service

For importing images, we recommend using curl

```
curl -v -F "imagefile=@vsrx-vm disk-15.1.qcow2" -F "cname=vsrx-vm disk-15.1.qcow2"
-F "description=new-file" -F "device_family=NFX" -F "vendor=juniper" -F
"major_version=15" -F "minor_version=1" -F build_num="1.1.1" -F
"supported_platform=NFX" -F "supported_platform=PORTER" -F
"image_type=DEVICE_IMAGE" -H "X-AUTH-TOKEN: $TOKEN" http://<central-ip>/ims-
central/upload_image_file
```

2.4.8. Ship a Device

Send a POST to:

```

/<central-ip>/tssm/ship-device

{
    "input": {
        "shipped_device": [{
            "customer_name": "Pepsi",
            "site_name": "Pepsi-site",
            "serial_number": "<nfx-serial-number>",
            "activation_code": "7878"
        }],
        "job_name_prefix": "Pepsi-site-ship-device"
    }
}

```

2.4.9. Update the VNF Password

1. Get the VNFD package UUID:

Send a GET request to:

```

/<csp-ms-vm>/restconf/data/maestro/catalog/vnfd-package

```

1. Copy the body of the package by sending a GET request:

```

/<csp-ms-vm>/restconf/data/maestro/catalog/vnfd-package/uuid

```

1. Update the password using a PUT request:

```

/<csp-ms-vm>/restconf/data/maestro/catalog/vnfd-package/uuid

```



Any password update fails if there are active instances that reference the VNFD package. If you find that this is the case, you should perform a VNFMDB clean up.

2.5. View Monitoring and Alarms

2.5.1. Monitor Device Data for UCPE

To get monitoring data for ucpe device, send a POST to:

```

/fmpm-provider/get_perfparams

```

with a payload that contains the nsID in json format like the following example:

```
{  
  "input": {  
    "ns_id": nsId  
  }  
}
```

2.5.2. View Alarms

To show device status on device icon:

For management state, send a GET request to the following endpoint:

```
/ems-central/device/<deviceId>
```

To obtain the number of critical alarms, send a GET request like the following:

```
/data-view-central/tenant-sites/<topologySiteId>
```

To show device status list when click on device icon, send a POST request to:

```
/fmpm-provider/alert_status_object/_filter
```

with json-formatted information in the body like the following:

```

{
  "query": {
    "bool": {
      "must": [{
        "term": {
          "site._raw": "{{siteuuid}}"
        }
      }, {
        "not": {
          "term": {
            "severity._raw": "normal"
          }
        }
      }]
    }
  },
  "from": 0,
  "size": 50,
  "detail": true,
  "sort": {
    "last_update_time": {
      "order": "desc"
    }
  }
}

```

2.6. Terminate and Disconnect

To completely terminate and disconnect a customer:

1. Stop the network service instance
2. Detach the service profile from the customer.
3. Remove the network service instance (POP) so that it is no longer on the site.
4. Remove the site with customer (in one step) or remove the site and then remove the customer (in two steps).

2.6.1. Terminate a network service

Stop tssm nf-v-service-instance using POST to:

```
http://<central-ip>/tssm/service-terminate
```

with a payload like the following:

```
{
    "input": {
        "instance_uuid": "<nfv-service-instance-uuid>"
    }
}
```

2.6.2. Detach Service Profile From a Customer

Detaches a service profile, which reverses addition using `/<cso-ip address>/tssm/import-service-profile` above.

Send a POST to:

```
/<csp-ms-vm>/tssm/ref-update
```

with a json object in the body that identifies the customer and contains a an operation parameter with value of "DELETE", like the following:

```
{
  "type": "customer",
  "uuid": "dXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "ref-type": "nfv_service_profile",
  "ref-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "operation": "DELETE"
}
```

You can verify that service profile is detached from the customer by getting a list of the service profiles by sending a POST to:

```
/<csp-ms-vm>/tssm/get-service-profiles
```

with a customer id like the following:

```
{
  "input": {
    "customerid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

The response verifies that the transaction completed:

```
{
  "output": []
}
```

2.6.3. Remove a POP

POST `http://<central-ip>/topology-service/remove-pop`

```
{
  "input": {
    "job_name_prefix": "Delete-PoP",
    "pop": [{
      "name": "pop-A"
    }]
  }
}
```

2.6.4. Remove a Tenant

POST `http://<central-ip>/tssm/remove-site`

```
{
  "input": {
    "job_name_prefix": "Tenant Delete",
    "tenant_name": "customer-A",
    "remove_tenant": true,
    "forced": true,
    "sites": []
  }
}
```

2.6.5. Remove a Service Instance

Send a DELETE request that contains the service instance uuid as in the following example:

`/<central-ip>/tssm/nfv-service-instance/<nfv-service-instance-uuid>`

2.6.6. Remove One or More Site(s) From a Customer

Send a POST request to:

```
/<central-ip>/tssm/remove-site
```

with information about the customer and site(s) as in the following example:

```
{
  "input": {
    "job_name_prefix": "Tenant Delete",
    "tenant_name": "Customer-A",
    "remove_tenant": false,
    "forced": true,
    "sites": [{
      "site_name": "Site-2"
    }, {
      "site_name": "corp-vpn-right"
    }, {
      "site_name": "Site-1"
    }]
  }
}
```

2.6.7. Remove a Customer That Has No Sites

Send a POST request to:

```
/<central-ip>/tssm/remove-site
```

with a payload like the following:

```
{
  "input": {
    "job_name_prefix": "Tenant Delete",
    "tenant_name": "Customer-A",
    "remove_tenant": true,
    "forced": true,
    "sites": []
  }
}
```


Chapter 3. Distributed Service Orchestration

Distributed Service Orchestration is handled using the Network Service Controller (NSC), with which you can perform the following tasks through its APIs:

- Define tenant topologies.
- Add/delete sites to existing topologies.
- Control the automatic enabling of devices at the customer.
- Set up network connections defined in the topology.
- Enable end-user configuration of CPE devices.
- Monitor device and link status.

3.1. NSC Overview

Use the NSC to implement and manage distributed CPE environments and topologies. It provides the needed functionality to manage distributed domains that consist of on-premise customers' sites and that are comprised of CPE devices at multiple locations. With the NSC APIs, you can develop applications that manage distributed enterprise domains through interfaces that provide SDN controller functions for NFX platform orchestration.

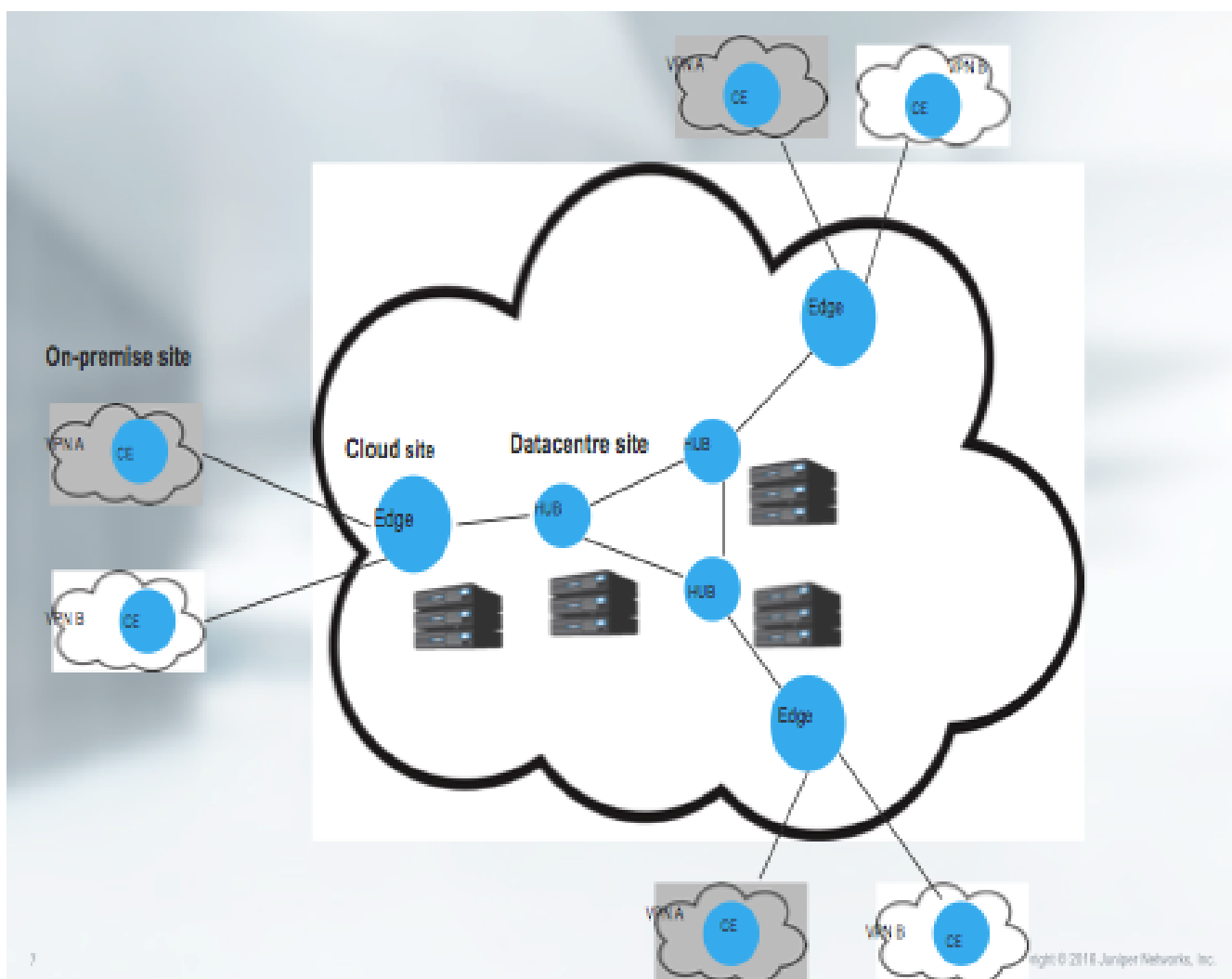


Figure 9. Differentiating between on-premise, cloud and data center sites

In the above illustration, **site types** are automation points in the network to which network services are attached

or at which configuration is performed as part of solution orchestration. There are three site types as follows:

- **on_premise_site** represents automation end point that is part of customer premise equipment.
- **cloud_site** represents an automation point in the network (upstream router) which represent the customer-site. Typically the routers where these end-points are present are connected to the CPE device through layer 2 circuits or overlay tunnels.
- **data_center_site** represents an automation point deeper in the network at some aggregation points. The end-points are identified only by route-target and network-services are orchestrated only by peering using routing protocols.



If you are new to the NSC, please see the Juniper documentation Web site for NSC product details, installation guide(s), and NFX 250 device guide.



NSC offers numerous customization possibilities for supporting various devices and connectivity options. Most customizations are performed by Juniper Professional Services team or Juniper certified System Integrators.

3.2. NSC-specific Requirements

NSC is intended to work with a cross domain orchestrator. NSC provides the needed capability for the domain orchestrator to orchestrate network services in a distributed domain.

Using a domain orchestrator, you can choose to use just the SDN controller interface of the NSC to provision VNFs on NFX. If you choose this option, then the domain orchestrator must be used to:

- maintain the NFX location.
- manage the NFX device lifecycle device connectivity.

NSC thus provides two sets of interfaces.



Each request requires a valid auth token obtained using **Openstack Keystone** service. For instructions on obtaining an auth token, see the section [Use Keystone to Authenticate](#).

3.3. NSC Workflows

NSC provides a rich set of VIM apis to manage services on VNF.

Through service chaining support using VIM, you can program the use of a higher layer application so that it can act as an SDN controller.

Use VIM northbound APIs, to perform following actions:

- Instantiate vlinks on NFX (bridge domains)
- Instantiate VNFs on NFX and attach them to vlinks (service chain building)
- Instantiate forwarding graphs consisting of vlinks, vnfs
- Instantiate pre-defined service chains in the NFX logical model and connect them between well defined end-points like the following:
 - * All LAN traffic to WAN traffic
 - * Specific LAN-WAN (e.g LAN-1 to WAN)
 - * Specific LAN-LAN traffic (e.g LAN-1 to LAN-2)
 - * Other combinations to enable multiple forwarding paths
- Use NSC as both SDN and domain controller.

- Use NSCs higher level definitions such as VNF packages and NSD packages to take advantage of packaging meta-information such as configuration template details, KPI information, and more.



A separate document is planned to provide additional details of VIM-based service chaining.

Following is a list of typical tasks that you might use in an NSC workflow:

- Deploy CSP
- Deploy POP
- Create Device Profile
- Create Services
- Create Tenants
- Create Sites for a tenant
- Ship device
- Device Activation
- Device Management
- Network Service Management
- Device status monitoring
- Network Service Status Monitoring
- Fault and Performance monitoring
- Network Service Deletion
- Site Deletion
- Tenant Deletion

End-to-End Workflow

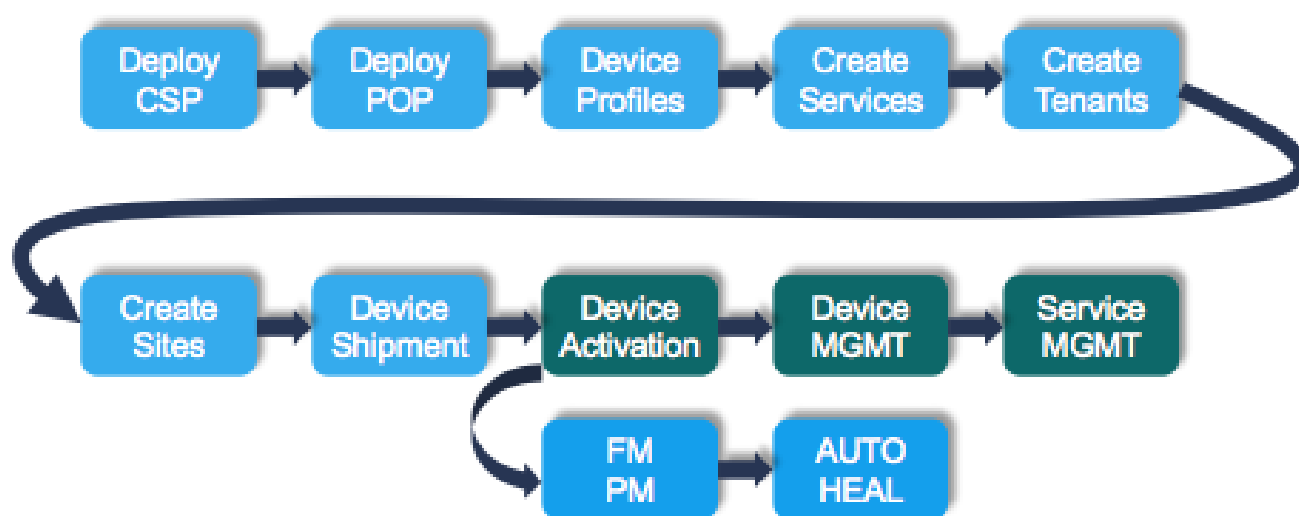


Figure 10. End-to-end NSC workflow

3.3.1. Microservices and Associated APIs for Distributed Services

The APIs associated with the following microservices are important to NSC:

- TSSM
- EMS
- FM-PM
- Data-view
- VIM
- data-view-central API

NSC maintains detailed information about the enterprise including:

- State of enterprise network (as defined in enterprise topology)
- State of all the devices
- State of VNFs running on the devices
- Fault and Performance monitoring data
- Top faults and historical data

All this information can be retrieved from the data-view-central APIs listed in the following table:

Table 11. API Types for Distributed Service Orchestration

API type	Description
alerts	Alerts for pops and sites in admin portal
appliances	list of appliances
audit-log	List of audit logs
configuration-template	List of Configuration Templates
connections	Connections between pops and sites in admin portal
cpe	List of CPEs in admin portal
cpe-general-info	List of CPE general information
db-alerts-history	The number of current alerts in system
db-current-alerts	The number of current alerts in system
db-top5-pops-alerts	Top5 pops with alerts
db-top5-sites-alerts	Top5 sites with alerts
db-top5-tenants-alerts	Top5 tenants with alerts
device-image	List of device images in admin portal
device-template	List of device templates in admin portal
device-template-workflows	List of device templates in admin portal
ems	list of ems
get-nsd-package-details	Get the list of nsd packages available to the specified nfv-service-profile
monitor_alert_cpes	Alerts for CPEs in monitor channel of admin portal
monitor_alert_pops	Alerts for POPs in monitor channel of admin portal

API type	Description
monitor_alert_services	Alerts for services in monitor channel of admin portal
monitor_alert_tenants	Alerts for tenants in monitor channel of admin portal
monitor_alert_tenant_object	Alerts for tenant objects in monitor channel of admin portal
pop	List of pops in admin portal
pop-with-alert	The pop with alerts list in admin portal
rebuild-view	RPC call to build all cached views
routers	list of routers
service	List of services in admin portal
service_detail	List of service detail
service-changes	List of service changes
serviceinstances	List of service instances
sites-with-alert	The site with alerts list in admin portal
tenant	List of tenants in admin portal
tenant-site-info	List of tenant sites information
tenant-sites	List of tenant sites
tenant-wd-tenant-type	List of tenants by type in admin portal
vims	list of vims
vnf-image	List of VNF images in admin portal
zero-touch-provisioning	List of Zero Touch Provisions in admin portal



In the uCPE 2.0 release only the IPAM (ip address management) features of NFX have been qualified. Services on NFX are instantiated through EMS functions described in the section [Create a Management IP](#)

The following table lists APIs supported by VIM layer in NSC:

Table 12. NSC APIs supported by VIM

API	Description
assign-port-ip	Assigns port IP address.
create-image	Creates image instance.
create-network-service-instance	Creates a network service instance.
create-vlink	Creates the required vlink.
create-vm	Creates new vm.
delete-image	Deletes image.
delete-vlink	Deletes vlink.
delete-vm	Deletes VM.
discover-vim	Discovers the current VIM.

API	Description
discover-vlink	Discovers the current VLink.
flavor	list of VIM Flavors onboarded in VIM microservice.
free-port-ip	Frees up port IP address.
get-network-service-instance-op-status	
get-resource-inventory	Gets current resource inventory.
get-vlink-op-status	Gets the current operational status for vlinks.
get-vm-op-status	Gets the current operational status for VMs.
get-vnf-op-status	Gets the VNF operational status.
image	list of VNF images onboarded in VIM microservice and also in VIM instances
image-op-status	Lists images uploaded onto a VIM instance with transfer status.
job	Entity used to track the job status (submitted; running; completed or failed).
network-service-instance	Lists Network Service Instances created in VIM microservice and VIM instances.
network-si-status	Entity for network service operation status.
nfvi-domain	List of nfvi domains created under vim instance.
resource-inventory	List of VIM resource-inventory.
resource-pool	List of VIM resource-pools.
role	List of roles create in VIM Microservice.
start-network-service-instance	Startup NS instance.
stop-network-service-instance	Stop NS instance.
tenant	list of tenants onboarded in VIM microservice.
terminate-network-service-instance	Terminate NS instance.
update-image	Update an image.
update-network-service-instance	Updates the network service instance.
user	Users created in VIM microservice.
user-role	List of Domain User-Role relationship created in VIM microservice.
vim-instance	Virtualized Infrastructure Manager instances like Openstack or JDM or AWS onboarded in VIM microservice. Each VIM instance has its own nfvi-domain and Flavor and tenant and User and role.
vlink-instance	List of virtual link instances created in VIM microservice and in VIM instance.
vlink-op-status	List of vlinks and their status created in VIM microservice.
vm-instance	List of virtual machine instances created using VIM microservice in a VIM instance.
vm-op-status	Entity for the vm operation status.
vnf-instance	List of VNF instances created in VIM microservice and in VIM instances.
vnf-op-status	List of vlinks and their status created in VIM microservice.



Please find additional details of the above interfaces in the API Reference section under [Virtual Infrastructure Manager](#).

3.3.2. Import a Point of Presence (POP)¶

To import a POP in CSO, you create a json-formatted object that contains the all the needed information, and use it for the payload of your REST request (see the following example).

Parameters for Onboarding POPs

The following table contains a list of parameters for use in onboarding POPs.

Table 13. Parameters for onboarding POPs in a distributed environment

Parameter	Req'd?
Datatype	Description
dc_name:	Y
String	Specify the type of POP; regional POP that serves a specific geographic region or central POP that serves all regions."
name:	Y
String	Specify the name of the POP.
address	Y
	Identifies the object type.
street	Y
String	Specify the street location of the POP.
city	Y
String	Specify the name of the city.
state	Y
String	Specify the state of POP location.
zip_code	Y
String	Specify the country's zip code or postal code.
country	Y
String	Specify the country.
coordinates	N
obj	Object contains geographic coordinates.
latitude	N
String	Latitude.
longitude	N
String	Longitude.
name	Y
String	Specify the name of the VIM instance using any number of alphanumeric characters including special characters.
vim_type	Y
enum	Specify VIM type of cloud or uCPE—default is cloud.

Table 14. UCPE

Parameter	Req'd?	Datatype	Description
device	N	String	Provider edge device for the POP.
name	Y	String	Specify the Physical Network Element (PNE) located at the POP using any number of alphanumeric characters including special characters. The PNE can perform the function of Edge Router or Ipsec concentrator or GRE tunnel terminator.
device_ip	Y	IP address	Specify the management IP address of the device.
pnf_package	N	String	Name of package providing metadata and config templates needed to program a PNF device for service chain attachments (in the case of vCSO).
assigned_device_profile	Y	String	Name of the device profile assigned to this device.
authentication	Y	String	Specify auth type; default is 'password_based'.
password_based	N	String	Auth mechanism.
username	Y	String	Specify the device login username.
password	Y	String	Specify the device login password.

After importing the POP that you will use for your new tenant, you can then onboard one or more tenant(s).

Import a New POP:

Send a POST request to your CSO server:

```
http://<CSO_Central_MS_ip>/topology-service/import-pop
```

with json code in the payload that describes the POP that you are importing.

The following json example illustrates data needed for importing both vim and pnf and contains a few comments describing key items:


```

curl -vk -X POST -H "Cache-Control: no-cache" \
-H "X-Auth-Token: bbf35b4c222e47e2848d186c0dfe8e24" \
-H "Content-Type: application/json" \
-d '
{
  "input": {
    "pop": [
      {
        "dc_name": "${regional_name}",
        "name": "${pop_name1}",
        "address": {
          "street": "1134 Innovation Way",
          "city": "Sunnyvale",
          "state": "CA",
          "zip_code": "94089",
          "country": "USA"
        },
        "device": [
          {
            "name": "${pe_device1}",
            "device_ip": "${pe_ip_addr1}",
            "family": "${pe_family}",
            "assigned_device_profile": "${pe_device_profile}",
            "authentication": {
              "password_based": {
                "username": "${pe_username}",
                "password": "${pe_password}"
              }
            }
          }
        ]
      }
    ]
  }
}

```

After importing the POP for your new tenant(s), you can then onboard one or more tenant(s).

3.4. Onboard Tenants and sites

The following table contains a list of parameters for use in onboarding tenants. The json-formatted model is available for additional details in the Data Model chapter.

Table 15. Parameters for onboarding tenants in a distributed environment

Parameter	Req'd?	Datatype	Description
tenant_name	Y	String	Specify the type of POP—regional (serves a specific geographic region) or central (serves all regions).
tenant_admin	N	String	Administrator for the tenant.
admin_user_name	Y	String	Specify admin user name.
admin_user_password	Y	String	Specify admin password.
tenant_type	Y	enum	Specify either "default" "small" "medium" "large" or "xlarge"—defaults to small if not provided.
managed_wan_topology	obj	String	Managed WAN topology.
network	Y	String	Tenant network.
network_name	Y	String	Name of the customer L3VPN network.
site	Y	String	List of site details.
site_name	Y	String	Specify name of the site.
site_description	N	String	Specify description of the site and additional information about that site.
location	Y	String	Location by address.
street	Y	String	Specify the street location of the POP.
city	Y	String	Specify the name of the city.
state	Y	String	Specify the state of POP location.
zip_code	Y	String	Specify the country's zip code or postal code.
country	Y	String	Specify the country
on_premise_site			
cpe_as_number		String	BGP Autonomous system number on cpe device.
access_info			
router_name	Y	String	Name of router
router_as_number	Y	String	BGP autonomous system number on router.
oam_traffic			
vlan_id		UInt16	OAM Vlan for inband management
gateway_ip		Inet:ip_address	OAM Traffic gateway ip address
ip_prefix		Inet:ip_address	IP Prefix assigned to site management network
wan_traffic			List of WAN networks supported on this site. Each WAN network is identified by the WAN link name.
wan_link_name		Enumeration {WAN_0,	WAN link name
		WAN_1,	
		WAN_2,	
		WAN_3}	
vrf_name		string	Data access link VRF name
vlan_id		UInt16	VLAN id associated with the data link

Parameter	Req'd?	Datatype	Description
local_ip_prefix		Inet:ip_prefix	Local ip prefix of the wan link. If IPsec is enabled, this ip would be the local tunnel interface ip prefix.
remote_ip_prefix		Inet:ip_prefix	Remote ip prefix of the WAN link. If ipsec is enabled, this ip would be the remote tunnel interface ip prefix.
ipsec_info			
ipsec_concentrator_name		String	IPSec concentrator device name.
internet_gw_ip		Inet:ip_address	Internet gateway address for ipsec tunnel.
pop_info	Y	String	Information on POP
pop_name	Y	String	Specify name of pop managing the site
route_target	Y	String	Specify route target of the left of the service chain
left_virtual_networks	Y	String	Specify site name of the right network. A special name "INTERNET" is used for internet breakout
right_network_name	Y	String	Right corresponding network (the data_center site name of the right network—a special name "INTERNET" is used for Internet breakout).
data_center_site_info	Y	String	One and only one site per tenant.
pop_name	Y	String	Specify name of pop for the site.
route_target	Y	String	Specify route target for corporate data center network. New VLink with route-target and subnet is created and saved as corp_transit_net_id in topology site properties.
subnet	Y	String	Specify subnets of corporate data center network.
internet_info	N	String	Information on Internet for parent object
route_target	Y	String	route target for Internet network
subnet	Y	String	list of subnet ipv4 address for Internet network
vl_name	Y	String	Name of virtual language.
onboard	N	Boolean	Default is false; setting to true causes an import of the indicated virtual network object from VIM, while a value of false causes creation of a virtual network in the VIM with the specified name. In both cases, creates a link between the VIM object to an entry in the local database with the same name.

3.4.1. Onboard a Tenant

Send a POST request (with auth token) to your CSO server:

```
/<CSO_Central_MS_ip>/tssm/onboard-tenant
```

with json code in the body that describes the tenant using a minimum of two json objects for tenant identification and associated topology type. The json body can contain as many child json objects as needed to describe sites for the tenant.

```
POST http://<ip-addr>/tssm/onboard-tenant
```

Onboard a Tenant With a Site:

Send a POST request to:

```
<CSO_Central_MS_ip>:80/tssm/onboard-tenant
```



The Ipsec_info field is optional

```
curl -vk -X POST -H "Cache-Control: no-cache" \
-H "X-Auth-Token: bb35b4c222e47e2848d186c0dfe8e24" \
-H "Content-Type: application/json" \
-d '
{ "input":
{
  "tenant_name" : "${customer1}",
  "tenant_type" : "${tenant_type}",
  "properties": {"property": [{"name":"ucpe_prop1", "value":"ucpe_val1"},{
"name": "ucpe_prop2","value": "ucpe_v2"}]},
  "managed_wan_topology": {
    "network": [
      {
        "network_name": "${network_name}",
        "site": [
          {
            "site_name" : "${site1}",
            "site_description" : "${site1_description}",
            "properties": {"property": [{"name":"ucpe_prop1", "value"
:"ucpe_val1"},{"name": "ucpe_prop2","value": "ucpe_v2"}]},
            "location" : {
              "street": "site1 street",
              "city": "LA",
              "state": "site1 state",
              "zip_code": "99990",
              "country" : "USA"
            },
            "device_template_name": "${cpe_device_template}",
            "on_premise_site_info" :{
              "cpe_as_number" : "${cpe_as_number1}",
              "access_info" : {
                "router_name" : "${pe_device1}",
                "router_as_number" : "${router_as_number}",
                "oam_traffic": {
                  "ip_prefix": "${oam_prefix1}",
```

```

        "gateway_ip": "${oam_gw1}",
        "vlan_id": ${oam_vlan_id1}
    },
    "wan_traffic": [
{
            "wan_link_name": "${wan_link_name1a}",
            "vlan_id": ${data_ip_pool1a_vlan_id},
            "local_ip_prefix": "${data_ip_pool1a_prefix}",
            "remote_ip_prefix": "${data_ip_pool1a_gw_prefix}"
        },
{
            "wan_link_name": "${wan_link_name1b}",
            "vrf_name": "${data_vrf_name1}",
            "local_ip_prefix": "${data_ip_pool1b_prefix}",
            "remote_ip_prefix": "${data_ip_pool1b_gw_prefix}",
            "ipsec_info": {
                "ipsec_concentrator_name": "${pe_device1}",
                "internet_gw_ip": "${internet_gw_ip1}"
            }
        }
    ]
}

}

}

]

}

}

```

Get a List of Existing Tenants and Associated UUIDs

Before you can perform updates and changes to existing tenants (customers), you must obtain the customer UUID associated with the existing tenants.

Send a GET request (with auth token) to your CSO server:

```
//70.175.240.91/tssm/customer
```

The responds lists of all customers' names and their associated UUIDs like the following example:

```
{
  "href": "http://10.102.86.17/tssm/customer/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "fq_name": [
    "default-domain",
    "Tenant_VJ",
    "Tenant_VJ"
  ],
  "uuid": "$ABCDEF123456" ①
}
```

① Tenant UUID.

Import Images into Image Management Service

The following examples show how NFX or VSRX image can be uploaded to CSO using cURL:

- For uploading to NFX:

```
curl -vk -X POST -H "Cache-Control: no-cache" \
-H "X-Auth-Token: $ABCDEFG1234567" \
-H "Content-Type: multipart/form-data" \
-F "imagefile=@jinstall-nfx-2-flex-15.1-20160701-15.1X53-D41.1.secure-domestic-signed-1.0.0.tgz" \
-F "image_type=DEVICE_IMAGE" \
-F "vendor=Juniper" \
-F "device_family=NFX" \
-F "major_version=15" \
-F "cname=juniper_nfx_1.5_img.tgz" \
-F "minor_version=1" \
"http://10.155.78.212:80/ims-central/upload_image_file"
```

- For uploading to SRX:

```

----
curl -vk -X POST -H "Cache-Control: no-cache" \
-H "X-Auth-Token: $ABCDEFGF1234567" \
-H "Content-Type: multipart/form-data" \
-F "imagefile=@media-vsrx-vmdisk-15-1X49-D40-6-1.0.0.qcow2" \
-F "image_type=DEVICE_IMAGE" \
-F "vendor=Juniper" \
-F "device_family=SRX" \
-F "major_version=15" \
-F "cname=vsrx-vmdisk-15.1.qcow2" \
-F "minor_version=1" \
"http://XX.XX.XX.XXX:80/ims-central/upload_image_file"
----

```

3.4.2. Ship a Device

The following cURL example contains json-formatted data and illustrates a request to ship a device:

```

curl -vk -X POST -H "Cache-Control: no-cache" \
-H "X-Auth-Token: $ABCDEFGF1234567" \
-H "Content-Type: application/json" \
-d '
{
  "input": {
    "shipped_device": [
      {
        "customer_name": "${customer1}",
        "site_name": "${site1}",
        "serial_number": "${serial_number1}",
        "activation_code": "${activation_code}"
      }
    ]
  }
}
' "http://<CSO_Central_MS_ip>:80/tssm/ship-device"

```

During testing the following API can be used to get the device authenticated directly using an API. This can be helpful when troubleshooting.

Authenticate Device (bypasses the need to activate device from client):

```
curl -vk -X POST -H "Cache-Control: no-cache" \
-H "X-Auth-Token: $ABCDEFG1234567" \
-H "Content-Type: application/json" \
-d '
{
  "input": {
    "unique_id": "${serial_number1}",
    "activation_code": "${activation_code}",
    "expiry_duration": 120
  }
}
' --url 'http://<CSO_Central_MS_ip>:80/activation-service/authenticate-device'
```

3.5. Notification

For dms (device management service) notification:

- For generic notification, listen on the exchange dms_notification for (type: topic); routing key format is "device_uuid"+"connection_id"
- To receive all the state change message then use the routing key '\#'
- To receive all notification for a specific device use routing key "device_uuid"."'\#'
- To receive all notification for a specific component use routing key "\#"."JDM'

Payload format:

```
{"device_id": "", "device_state": "", "device_previous_state": ""}
```

3.5.1. Device State Change Notification

The following json-formatted example illustrates how the device state changes is modeled:


```
notification device_state_changed {  
    description  
        "Notify services about device's state change.";  
    leaf device_id {  
        type yang:uuid;  
        description  
            "Device id."; // format sitename-nfx  
    }  
    leaf device_state {  
        type ems:DeviceManagementStateEnum;  
        description  
            "Device's new state.";  
    }  
    leaf device_previous_state {  
        type ems:DeviceManagementStateEnum;  
        description  
            "Device's previous state.";  
    }  
}
```

3.5.2. Device Management State Notification

```

typedef DeviceManagementStateEnum {
    type enumeration {
        enum "EXPECTED" {
            description
                "device is modelled and is expected to be activated.";
        }
        enum "ACTIVATION_IN_PROGRESS" {
            description
                "device activation is in progress";
        }
        enum "ACTIVE" {
            description
                "device is active";
        }
        enum "AUTH_FAILED" {
            description
                "device authentication failed";
        }
        enum "RMA" {
            description
                "device is in RMA state";
        }
        enum "ZERIOZED" {
            description
                "device is in factory default state";
        }
        enum "READY_FOR_RESTORE" {
            description
                "device is ready for restoration";
        }
    }

    description {
        "Management state of device from device management perspective,
        device activation states will be available in activation service";
    }
}

```

3.5.3. Monitor a Long-Running Job

As of this release, there is no automated polling. If you need to monitor a long-running job, you can set up polling using GET requests (with auth tokens) to your CSO server, using the **job-id**, and watch for **"status": "success"** and/or **"results": "complete"**.

```
/<csp-ms-vm>/job-service/job/<job-id>
```

A successful response contains information about the job, including **start time**, **domain**, **job id**, **type**, and other

data, like the following:

```
{
  "job": {
    "status": "success",
    "start_time": 1471656407,
    "job_type": "csp.tssm_onboard",
    "results": "complete",
    "name": "onboard_walgreen101_csp.tssm_onboard_1471656407.25",
    "fq_name": ["default-domain",
               "default-project",
               "onboard_walgreen101_csp.tssm_onboard_1471656407.25"],
    "uuid": "<job-id>",
    "uri": "/job-service/job/<job-id>"
  }
}
```

3.5.4. Delete a Site

Send a POST to:

```
/<csp-ms-vm>/tssm/remove-site
```

with a payload like the following:

```
{
  "input": {
    "job_name_prefix": "Tenant Delete",
    "tenant_name": "MI10",
    "remove_tenant": false,
    "forced": false,
    "sites": [{
      "site_name": "MI10-site-1"
    }]
  }
}
```

3.5.5. Delete a Tenant

Send a POST to

```
http://10.155.78.206/tssm/remove-site
```

with a payload like the following:

```
{
  "input": {
    "job_name_prefix": "Tenant Delete",
    "tenant_name": "MI10",
    "remove_tenant": true,
    "forced": false,
    "sites": [{
      "site_name": "MI10-site-1"
    }]
  }
}
```

3.5.6. Delete a POP Object

To delete a POP object, send a POST request to:

```
<central-ip>/topology-service/remove-pop
```

with a payload like the following:

```
{
  "input": {
    "job_name_prefix": "Delete-PoP",
    "pop": [{
      "name": "pop-A"
    }]
  }
}
```

3.6. Display UCPE Device Status Alerts

The following procedure illustrates getting UCPE device alerts.

Alerts are explicitly queried with the FM/PM (Fault and Performance Management) service.

To query the device status alerts, you use the following as input parameters:

- device object ID in the EMS service
- tenant name
- site name

Step 1: Use the tenant name and site name as parameters to GET the site ID:

```

resource_name: topo_site_uuid
rest_api:
  service_name: local.csp-topology
  method: POST
  uri: /topology-service/fqname-to-id
  http_body: |
    {
      "fq_name": ["default-domain", "{{tenant_name}}", "{{site_name}}"],
      "type": "site"
    }

```

Step 2: Get the device object in the topology service from the site object within the enterprise topology:

```

resource_name: topo_dev
input_resources:
- topo_dev
rest_api:
  service_name: local.csp-topology
  method: GET
  uri: |
    /topology-service/device?back_ref_id={{topo_site_uuid}}

```

Step 4: Get the EMS device object id from the device object within the topology service by sending a GET request like the following:

```
topo_dev.db_id
```

Step 5: Get alert status on device using the following query to FM/PM service

Send a GET request to:

```

/fmpm-provider/alert_status_object?count=False&filter=id+eq+<<device-
id>>+and+severity+eq+critical+alert_type+eq+host

```

The response will be similar to the following example:

```
{
  {
    'fq_name': 'XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX', // fully qualified name
of device
    'uuid': 'XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX', // alert object
uuid
    'uri': '/fmpm-provider/alert_object/XXXXXXXX-XXXX-XXXX-XXXX-
XXXXXXXXXXXX' // url to get more alert details
  }
}
```

If device is reachable then the API returns an empty list in the response.

If the above list is not empty, use the URI listed in the alert object to obtain more information about the alert by performing a GET operation.

An example of an alert object with details:

```
{
  "alert_object":{
    "alert_type":"service",
    "fq_name":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "severity":"critical",
    "start_time":1474105605,
    "object_type":"UCPE_DEVICE",
    "site":"SITE-001",
    "object_id":"/VSRX/ipsec/vpn/default-vpn/status",
    "server":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "reason":["'131073 is inactive'"],
    "pop":"POP1",
    "device":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "region":"dc2",
    "id":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "tenant":"TENANT-001"
  }
}
```

3.6.1. Get overall Device Status

To get the current overall status of the device, get the **management_state** by sending a GET request to:

```
/ems-central/device/<deviceId>
```

The response will resemble the following:

```
{
```

```

"device": {
  "parent_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "display_name": "Juniper-site-13-NFX-250",
  "parent_type": "project",
  "system_info": {
    "serial_number": "123123123",
    "host_name": "default_host"
  },
  "perms2": {
    "owner": "$ABCDEFGF1234567",
    "owner_access": 7,
    "global_access": 7,
    "share": []
  },
  "fq_name": [
    "default-domain",
    "Juniper",
    "Juniper-site-13-NFX-250"
  ],
  "management_state": "EXPECTED", # current state of the device
  "name": "Juniper-site-13-NFX-250",
  "device_family_refs": [
    {
      "to": [
        "default-domain",
        "juniper-nfx"
      ],
      "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", //device family id
      "attr": null,
      "uri": "/ems-central/device-family/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" #uri to get device family info.
    }
  ],
  "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", //device uuid?
  "region": "regional",
  "uri": "/ems-central/device/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", #uri to
get device info
  "id_perms": {
    "enable": true,
    "uuid": {
      "uuid_mslong": $ABCDEF123456,
      "uuid_lslong": $ABCDEF123456,
    },
    "created": "2016-10-06T18:22:43.207968",
    "description": null,
    "creator": "cspadmin",
    "user_visible": true,
  }
}

```

```

    "last_modified": "2016-10-06T18:22:43.207968",
    "permissions": {
      "owner": "cspadmin",
      "owner_access": 7,
      "other_access": 7,
      "group": "_member_",
      "group_access": 7
    }
  },
  "abstract_configs": [
    {
      "to": [
        "default-domain",
        "Juniper",
        "Juniper-site-13-NFX-250",
        "stageone_config"
      ],
      "uri": "/ems-central/abstract-config/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" #abstract config id
    }
  ],
  "parent_uri": "/ems-central/project/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "unique_id": "123123123"
}

```

3.7. Get Site Information

You can get information about a site, including alarms.

Sending a request to **data-view-central** on **tenant-sites** with the site ID, like the following request, results in a response that lists any critical alarms along with other information:

```
/data-view-central/tenant-sites/<topologySiteId>
```

Example output:


```
{
  "tenant-sites": {
    "status": "activated",
    "count_critical": 0, // Count of critical alarms
    "display_name": "Juniper-site-13",
    "tenant_name": "Juniper",
    "href": "http://localhost:82/data-view-central/tenant-sites/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "site_type": "on_premise",
    "ems_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "name": "Juniper-site-13",
    "count_minor": 0,
    "fq_name": [
      "Juniper-site-13"
    ],
    "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", // topo site uuid
    "coordinates": "",
    "pop_name": "pop_pe1",
    "number_of_services_activated": 0,
    "tssm_site_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "pnf_id": "",
    "count_major": 0,
    "tenant_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "location": "site1 street, site1 ciity"
  }
}
```

3.7.1. Get Site Topology Information

To get information about the site topology, send a POST request to:

```
/topology-service/fqname-to-id
```

```
resource_name: topo_site_uuid
rest_api: <endpoint>
service_name: local.csp-topology
```

```
{
  "fq_name":
  [
    "default-domain",
    "{
      {tenant_name}
    }",
    "{
      {site_name}
    }"
  ],
  "type": "site"
}
```

3.8. Monitor UCPE Device Performance

Send a POST to the following API:

```
/fmpm-provider/get_perfparams
```

With a payload like the following:

```
{
  "input": {
    "ns_id": nsId
  }
}
```

A successful response resembles the following:

```

{
  "output": {
    "status": "success",
    "vnf_params": [
      {
        "status": "up",
        "params": {
          "vnf": [],
          "uptime": {
            "percentage": "100.0",
            "absolute": "2 days, 19:41:24"
          },
          "sessions": "5",
          "timestamp": "1475894131",
          "rate": {
            "right": {
              "input": "0.1 Mbps",
              "ifname": "<name>-0/0/1",
              "output": "0.39 Mbps"
            },
            "left": {
              "input": "0.0 Mbps",
              "ifname": ",<name>-0/0/0",
              "output": "0.0 Mbps"
            }
          },
          "vnf-image": "vsrx"
        },
        "device_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
      }
    ],
    "ns_id": null
  }
}

```

3.9. Enable VSRX Functions on a UCPE Site

When NFX on a UCPE site is activated, by default the VSRX is brought up as part of the zero touch activation.

However, in cases where you plan to use security functions like Firewall, NAT and UTM, the VSRX must be explicitly enabled for service functions.

This is done using the following procedures.

3.9.1. Update Topology-service Site Properties

To update topology-service site functions, send a PUT request to:

```
/topology-service/site/<topologySiteId>
```

With a payload like the following:

```
{
  "site": {
    "db_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "fq_name": [
      "default-domain",
      "DomainX",
      "Site-XXX"
    ],
    "name": "Site-XXX",
    "device_refs": [
      {
        "to": [
          "default-domain",
          "DomainX",
          "Juniper-site-XXX"
        ],
        "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
        "attr": {
          "device_role": [
            "cpe"
          ]
        },
        "uri": "/topology-service/device/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" ②
      },
      {
        "to": [
          "default-domain",
          "default-project",
          "pe_ip_sec_device2"
        ],
        "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
        "attr": {
          "device_role": [
            "pe",
            "ipsec_concentrator"
          ]
        },
        "uri": "/topology-service/device/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
      }
    ]
  },
}
```

```

"parent_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"parent_type": "project",
"uri": "/topology-service/site/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"parent_uri": "/topology-service/project/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
"perms2": {
  "owner": "$ABCDEF123456",
  "owner_access": 7,
  "global_access": 7,
  "share": []
},
"id_perms": {
  "enable": true,
  "uuid": {
    "uuid_mslong": $ABCDEF123456,
    "uuid_lslong": $ABCDEF123456
  },
  "created": "2016-10-04T22:52:19.812795",
  "description": null,
  "creator": "cspadmin",
  "user_visible": true,
  "last_modified": "2016-10-05T00:11:08.899547",
  "permissions": {
    "owner": "cspadmin",
    "owner_access": 7,
    "other_access": 7,
    "group": "_member_",
    "group_access": 7
  }
},
"address": {
  "country": "some country",
  "state": "site1 state",
  "street": "site1 street",
  "zip_code": "99990",
  "city": "site1 ciity"
},
"display_name": "Juniper-site-16",
"properties": {
  "property": [
    {
      "name": "WAN_0",
      "value": {
        "local_ip_prefix": "112.10.10.1/24",
        "remote_ip_prefix": "112.10.10.254/24",
        "vrf_name": null,
        "ipsec_info": null,

```

```

        "wan_link_name": "WAN_0",
        "vlan_id": 10
    },
    {
        "name": "WAN_1",
        "value": {
            "local_ip_prefix": "90.16.16.1/29",
            "remote_ip_prefix": "90.16.16.2/29",
            "vrf_name": "VRF1",
            "ipsec_info": {
                "ipsec_concentrator_name": "pe_ip_sec_device2",
                "internet_gw_ip": "58.58.58.254/24"
            },
            "wan_link_name": "WAN_1",
            "vlan_id": null
        }
    },
    {
        "name": "cpe_as_number",
        "value": "65002"
    },
    {
        "name": "router_as_number",
        "value": "65000"
    },
    {
        "name": "enableVSRXservice", ③
        "value": {
            "profileId": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
            "tenant_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
        }
    }
]
},
"uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
}

```

① device id in topology service

② use this URI to get device id in EMS

③ this property needs to be set to enable vSRX functions

3.9.2. Get Config Templates Associated With VSRX

To get the config templates associated with a VSRX, you first identify the service chain associated with VSRX and then get the network service chain package details.

The API returns the details of the network service, including all the VNF package details of all VNFs that form the chain. The VNF package details of VSRX provide information about the config templates (abstract and function config). These config templates can be used to render the input forms needed to collect input parameters.

This is, therefore, a multi-step process, as follows:

To get the VSRX configure template:

Step 1: Send a POST with the profile UUID in order to obtain the service profile ID:

```
/tssm/get-nsd-package-details
```

with a payload like the following:

```
{
  "input": {
    "service_profileid": <profileuuid>
  }
}
```

Step 2: Using the information obtained, send a POST to:

```
/dms-central/resolve_device_profile
```

with a payload like the following:

```
{
  "input": {
    "device_profile_id": deviceProfileId,
    "workflow_name": "stage-2-config",
    "parameters": [{
      "name": "device_uuid",
      "str_value": deviceId_ems
    }]
  }
}
```

Step 3: Send a GET to obtain the device config template:

```
/dms-central/resolve_device_profile
```

Step 4: After rendering the config template and collecting input parameters the config can be saved by sending A PUT or POST to the following:

```
/ems-central/abstract-config
```

with a payload like the following:

```
{
  "abstract-config": {
    "parent_type": "device",
    "fq_name": <fqName>,
    "parent_uuid": <deviceId_ems>,
    "candidate_config": {
      "config_blob": <configData>
    },
    "template_refs": [{
      "to": <template_name>,
      "uuid": <template_uuid>
    }]
  }
}
```

Step 5: The config can be pushed (published) from NSC central to regional location by sending a POST to the following:

```
/cms-central/publish_configuration
```

with a payload like the following:

```
{
  "input": {
    "abstract_configs": [{"fqname": <fqname>}]
  }
}
```

Step 6: The config can be then pushed to the NFX device by sending a POST to the following:

```
/cms-central/deploy_configuration
```

with a payload like the following:


```
{
  "input": {
    "abstract_configs": [{"fqname": <fqname>}]
  }
}
```

This deploys the configuration.

3.10. Device Profile Workflows

Examples of device profile workflows are:

- Zero Touch Provisioning.
- VPN links startup.
- Stage2 workflows like creating vlans and dhcp configuration.

Device profile workflows provide models of device EMS operations.

If your needs exceed current capacities, the Juniper PS team can extend and/or customize device profiles.

3.10.1. Resolve a Device Profile

POST

```
/<dms-central>/resolve_device_profile
```

Payload:

```
{
  "input": {
    "device_profile_id": "deviceProfileId",
    "workflow_name": "stage-2-config"
  }
}
```

Create/Update an Abstract Config:

To build an abstract config for a template, provide values for config parameters in the request payload of a POST or PUT request.

PUT operations are used for adding configuration parameters for access from the GUI. Once these parameters have been added and the user clicks the GUI's **save** button and restarts the GUI, the parameters are saved.

```
/<ems-central>/abstract-config
```

With a payload like the following:

```
{
  "abstract-config": {
    "parent_type": "device",
    "fq_name": [
      "default-domain",
      "default-project",
      "d59",
      "JUNOS/snmp-config"
    ],
    "parent_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "candidate_config" :{
      "config_blob" :  "{\"snmp\":{\"location\":\"test_loc\"}}}"
    },
    "template_refs": [
      {
        "to": [
          "snmp_location_template"
        ],
        "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
      }
    ]
  }
}
```

Get an Abstract Config

The following CRUD API can be used to retrieve the saved configuration values and is useful when UI is restarted.

Send a GET request to:

```
/ems-central/abstract-config/<id>
```

Publish an Abstract Config



If you are using the UI to input/publish abstract config variables: when you press the **Apply** button, the configuration is pushed to the device using the publish and deploy APIs. Use of the Publish functionality takes the abstract config, renders the config by performing parameter substitution and stores it for pushing to the device.

To publish, send a POST request to:

```
/cms-central/publish_configuration
```

With a json-formatted body like the following:

```
{
  "input": {
    "abstract_configs" : [
      {
        "fqname": [
          "default-domain",
          "default-project",
          "d59",
          "JUNOS/snmp-config"
        ]
      }
    ]
  }
}
```

Deploy an Abstract Config

Use the `deploy_configuration` API, which gathers all of the rendered config information and pushes it to the device.

Send a POST to the following URL:

```
/cms-central/deploy_configuration
```

With information in the body like the following example:

```
{
  "input": {
    "abstract_configs" : [
      {
        "fqname": [
          "default-domain",
          "default-project",
          "d59",
          "JUNOS/snmp-config"
        ]
      }
    ],
    "url" :
    "amqp://guest:guest@10.150.113.132:5672//?exchange=myexchange&routing_key=check"
  }
}
```

A successful response notification indicates that the application received device config deploy status like the following:

```

notification deploy_configuration_response {
  description
  "This notification is a response to the deploy_configuration RPC";
  leaf requestid {
    type yang:uuid;
    description
      "A generated unique id";
  }
  leaf status {
    type ems-types:StatusType;
    description
      "indicates sucess/failure of the deploy API";
  }
  leaf description {
    type string;
    description
      "Holds the generic error message or warnings";
  }
  list details {
    key "abstract_config_uuid";
    uses deploy_configuration_result;
  }
}

```

3.11. Provision VNFS on UCPE Devices

In the current release VNFS are provisioned as a device operation directly using the built-in EMS capability of CSO. The current release does not take advantage of the VIM capabilities to provision VNF.

See the section for a description of how VNFS will be instantiated on NFX in the upcoming releases taking advantage of VIM capabilities.

This section documents the methodology used in the current release.

3.11.1. Build VNF Scripts

VNF scripts are typically written by Juniper PS teams, and can provide the **start**, **stop** methods to start a VNF on stop a VNF on NFX device, in addition to VNF aliveness checks and other monitoring functions.

VNF script is needed to:

- perform bootstrap operations of the VNF.
- configure network interfaces once the VNF is up.
- provision default routes and set up any other start up time configuration needed for the VNF.

The script is named <VNF-package>.run and is placed in the same directory as VNF package.

Build a VNF Descriptor

VNF descriptor to be built and on-boarded by Juniper PS team. The primary purpose of VNF package is to derive the name of the VNF and associated VNF script.

Collect the following input parameters for your VNF script:

- Site uuid.
- Tenant uuid.
- device_id—uuid of NFX device.
- device_profile_id—uuid of the device profile associated with NFX device (See section xxx for device profile details).
- management_ip—IP—pool needed for ip address management for VNFs instantiated on the device. This information is specified during site creation time and stored along with site object.
- management_default_gw—default gateway address to reach management network that is specified at site creation time.

3.11.2. Create a Management IP

```
https://ssd-git.juniper.net/csp/csp-ipam/blob/master/yang/ipam.yang#L517  
(get_host_ip rpc)
```

Free a Management IP

```
https://ssd-git.juniper.net/csp/csp-ipam/blob/master/yang/ipam.yang#L582  
(release_host_ip rpc)
```

List All Sites

To get a list of all associated sites, send a GET to:

```
/tssm/site
```

The response lists all site objects.

Following is a partial example of a site object:

```

"site": {
  ...
  "site_type": "on_premise",
  "display_name": "Juniper-site-14",
  "device_template_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
  ...
  "ipam_scope": {
    "oam_pool": {
      "ip_prefix": "10.102.127.97/28",
      "default_gw": "10.102.127.110",
      "scope_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "ipam_pool_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ②
      "ipam_chunkid": null,
      "vlan_id": 15
    },
    "ip_pool": null
  },
  "name": "Juniper-site-14",
  "fq_name": [
    "default-domain",
    "Juniper",
    "Juniper",
    "Juniper-site-14"
  ],
  "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ③
  "topology_site_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ④
  ...
}

```

① device profile uuid

② you can use this to assign new management ip

③ site id in tssm

④ topology service site id

3.12. Manage Profile, Topology, Site and Pool IDs

Use the following endpoint to get device_profile_id, topology_site id, management_ipam_pool id, site id, and other associated information.

Send a GET request to:

```
/tssm/site/<siteid>
```

The site ID will resemble the following: 0a51a8d3-6619-4367-b3b7-3ab435638b3c

```

{
  "site": {
    ...
    "site_type": "on_premise",
    "display_name": "Site-XX",
    "device_template_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
    ...
    "ipam_scope": {
      "oam_pool": {
        "ip_prefix": "XX.XXX.XX.XXX/28",
        "default_gw": "XX.XXX.XX.XXX",
        "scope_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
        "ipam_pool_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ②
        "ipam_chunkid": null,
        "vlan_id": 15
      },
      "ip_pool": null
    },
    "name": "Name-ID-XX",
    "fq_name": [
      "default-domain",
      "Juniper",
      "Juniper",
      "Name-ID-XX"
    ],
    "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ③
    "topology_site_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ④
    ...
  }
}

```

① device profile uuid

② use this to assign new management ip

③ site id in tssm

④ site id in topology service

3.12.1. Get Device ID Associated With NFX

3.12.2. Get Site in Topology

Send a GET request to the following:

```
/topology-service/site/<topology-site-id>
```

The site topology id will resemble the following: 4ba17dd8-94dd-4244-8e0c-26781a35c1c5

A successful response resembles the following:

```
{
  "site": {
    ...
    "device_refs": [
      {
        "to": [
          "default-domain",
          "default-project",
          "pe_ip_sec_device1"
        ],
        "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
        "attr": {
          "device_role": [
            "pe",
            "ipsec_concentrator"
          ]
        },
        "uri": "/topology-service/device/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" ②
      },
      {
        "to": [
          "default-domain",
          "DomainX",
          "Site-XX"
        ],
        "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ③
        "attr": {
          "device_role": [
            "cpe"    => use this to find NFX device
          ]
        },
        "uri": "/topology-service/device/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX" ④
      }
    ],
    ...
  }
}
```

- ① topology service device id for ref object
- ② uri for device in topology service
- ③ topology device id
- ④ uri for device object details in topology service.

3.12.3. Assign a Management IP

For the request

- Obtain a **pool_id** using /topology-service/site/<topology-site-id>.
- For **host_ip_name**, assign any unique name.
- Obtain a **host_id** using /topology-service/site/<topology-site-id>.

Send a POST to:

```
/ipam/assign_host_ip
```

with information in the request body like the following example:

```
{
  "input": {
    "pool_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "host_ip_name": "nsd-package-name_mgt_ip",
    "host_type": "NFX", => device type
    "host_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

A successful response resembles the following example:

```
{
  "output": {
    "status": "SUCCESS",
    "host_ip_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
    "host_ip": "XX.XXX.XXX.XX/28", ②
    "default_gw": "XX.XXX.XXX.XX.110" ③
  }
}
```

- ① Save this for later use.
- ② Management IP.
- ③ Default management gateway.

3.12.4. VNF provisioning

This section documents VNF provisioning, including:

- Third Party VNF support
- Build VNF descriptor and package
- Build VNF script

Start a Third Party VNF

```
/dms-central/execute_device_task
```

```
execute_device_task-input {
    input (ExecuteDeviceTask_InputType, optional):
    }
ExecuteDeviceTask_InputType {
    operation : <string>, ①
    requestid : <string>, ②
    url : XX.XXX.XXX.XX/XX, ③
    package_name : <string> , ④
    device_id : <string> , ⑤
    device_profile_id : <string>, ⑥
    management_ip : <string> , ⑦
    management_default_gw : <string> , ⑧
}
```

- ① Operation operation of device task; string, optional.
- ② If this is specified then the same request id will be returned in the output; string, optional.
- ③ AMQP url where response message will be posted for the caller; string, optional.
- ④ Package image file name; string, optional.
- ⑤ Device ID; string, optional.
- ⑥ Device Profile ID; string, optional.
- ⑦ Management ip prefix of package; string, optional.
- ⑧ Management default gateway of package; string, optional.

start

```
{
  "input":{
    "operation":"start",
    "package_name":"silverpeak-vx-img",
    "device_id":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "device_profile_id":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "management_ip":"10.102.95.5/29","management_default_gw":"XX.XXX.XX.XX"
  }
}
```

Stop a Third Party VNF

Send a POST request to:

```
/dms-central/execute_device_task
```

stop

```
{
  "input":{
    "operation":"stop",
    "package_name":"silverpeak-vx-img",
    "device_id":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "device_profile_id":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "management_ip":"XX.XXX.XX.XX/29",
    "management_default_gw":"XX.XXX.XX.XX"
  }
}
```

3.12.5. Remove a Third Party VNF

Send a PUT request

```
/dms-central/execute_device_task
```

that contains a **remove** param like the following example:

```
{
  "input":{
    "operation":"remove",
    "package_name":"<xyz-img",
    "device_id":"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

Because each start and stop is an asynchronous operation, you may need to pass in the appropriate rabbitmq callback url to get the operational status.

Following is an example request body that specifies a rabbitmq url:

```
{
  "input": {
    "operation": "start",
    "url":
"amqp://guest:guest@10.155.90.232:5672/?exchange=myexchange&routing_key=check",
    "package_name": "silverpeak-vx-img",
    "device_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "device_profile_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "management_ip": "XX.XXX.XXX.XX/28",
    "management_default_gw": "1XX.XXX.XXX.XX.132"
  }
}
```

3.12.6. Resolve a Device Profile

Send a POST to:

```
/dms-central/resolve_device_profile
```

with a payload like the following:

```
{
  "input": {
    "device_profile_id": deviceProfileId,
    "workflow_name": "stage-2-config",
    "parameters": [
      {
        "name": "device_uuid",
        "str_value": deviceId_ems
      }
    ]
  }
}
```

3.13. Abstract Config

3.13.1. Get a Device Config Template

Send a GET request to the following endpoint:

```
/ems-central/abstract-config
```

Save an Abstract Config

Send a POST or PUT to the following endpoint:

```
/ems-central/abstract-config
```

with a payload like the following example:

```
{
  "abstract-config": {
    "parent_type": "device",
    "fq_name": <fqName>,
    "parent_uuid": <deviceId_ems>,
    "candidate_config": {
      "config_blob": <configData>
    },
    "template_refs": [{
      "to": <template_name>,
      "uuid": <template_uuid>
    }]
  }
}
```

3.13.2. Publish a Config

Send a POST request to:

```
/cms-central/publish_configuration
```

With a payload like the following example:

```
{
  "input": {
    "abstract_configs": [{"fqname": <fqname>}]
  }
}
```

3.13.3. Deploy a Config

Send a POST to

```
/cms-central/deploy_configuration
```

Payload:

```
{  
  "input": {  
    "abstract_configs": [{"fqname": <fqname>}]  
  }  
}
```

Chapter 4. Service Assurance

The Service assurance APIs are available to use in concert with both centralized and distributed service orchestration.

Service assurance functionality makes use of the messaging infrastructure that supports CSO. You can use this messaging infrastructure to set up and customize a set of messages and

Most Service assurance integrations with service orchestration involve implementing functionality that:

- Captures specific messages from a message queue that you have created and configured according to your specific needs.
- Extracts information from the captured messages.
- Assesses the extracted information.
- Based on the assessment, either triggers specific actions or simply continues monitoring.

Various implementations can be quite different in their details. However, by making use of the messaging infrastructure, CSO allows you to capture any messages that you need for your purposes.



Like other requests, Service Assurance requests require HTTP headers with *X-AUTH-TOKEN: token_value_* and *content-type: application/json_*.

4.1. Service Assurance Architecture

Event messages can be routed and consumed as needed using the Rabbit MQ message bus. The following diagram illustrates the high level architecture:

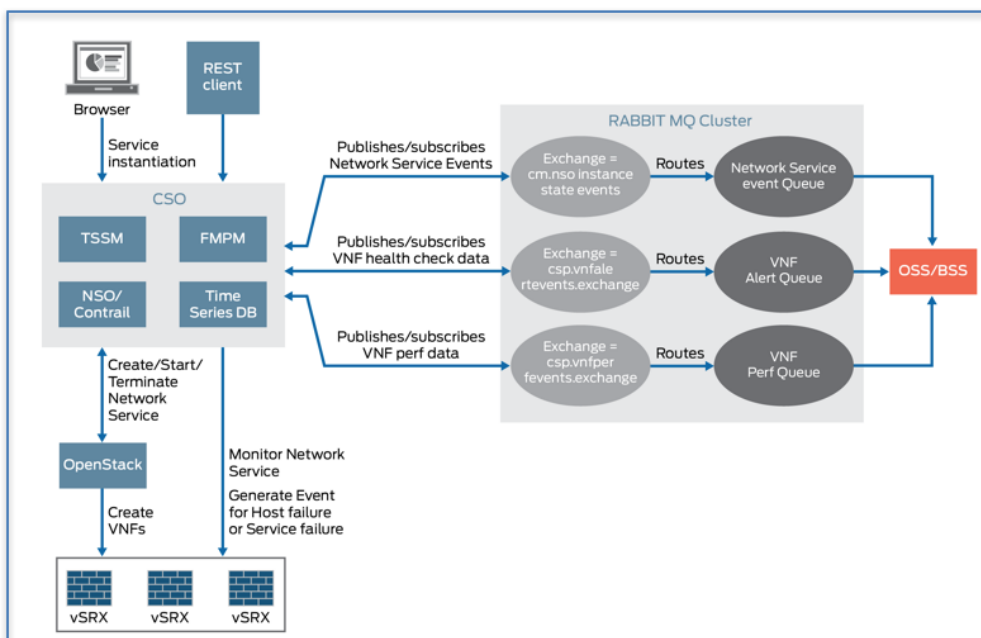


Figure 11. Service assurance architecture

The message publisher uses a fan-out exchange to manage queues that you can create and modify:

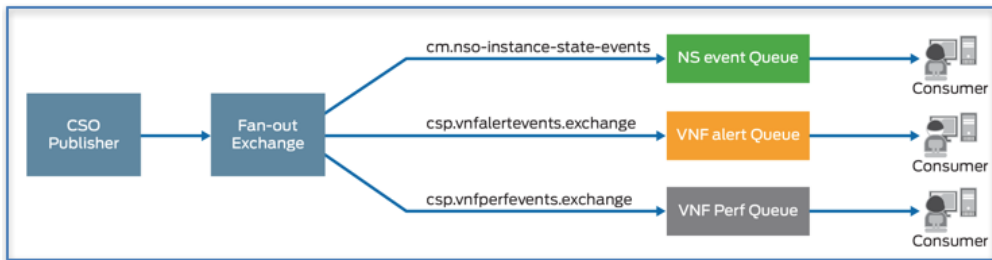


Figure 12. Message bus architecture

The system tracks changes using VNF life cycle state events. In our examples, the lifecycle event that are processed using the *cm.nso-instance-state-events* exchange.

Commonly the messages of interest will be state changes like the following message that indicates that the Network Service (labeled ns-instance-uuid) *<network service instance uuid>* has changed:

```

{
  "input": {
    "ns-instance-uuid": "<network service instance uuid>",
    "sequence-number": "0",
    "timestamp": "2016-08-22 21:50:19.638726",
    "state": "<current state of network service instance>",
    "ns-instance-url": "/restconf/data/maestro/nfv-instances/ns-instance
                      /<network service instance uuid>",
    "old-state": "<previous state of network service instance>"
  }
}

```

4.1.1. Network Service State Events

All NSO life cycle state events are published as messages and made available through the message bus. These messages contain parameters that can be used to build the json objects that you use as message payloads in the RESTful APIs.

For all the examples in this section, the exchange name is *cm.nso-instance-state-events*.

4.1.2. Typical Message Payload

State change messages are all timestamped and contain the service instance uuid and name, plus the *old-state* (previous state) and the *state* (current state) as in the following example:


```

{
  "input": {
    "ns-instance-uuid": "<network service instance uuid>",
    "sequence-number": "0",
    "timestamp": "2016-08-22 21:50:19.638726",
    "state": "<current state of network service instance>",
    "ns-instance-url": "/restconf/data/maestro/nfv-instances/ns-instance
      /<network service instance uuid>",
    "old-state": "<previous state of network service instance>"
  }
}

```

The following values are available to indicate *state* and *old-state* properties:

- ACTIVE
- CONFIGURE_ROLLBACK
- CONFIGURING
- ERROR
- INSTANTIATED
- INSTANTIATING
- INSTANTIATION_ROLLBACK
- PRE-INIT
- STARTING
- START_ROLLBACK
- STOPPING
- STOP_ROLLBACK
- TERMINATED
- TERMINATE_ROLLBACK
- TERMINATING
- UPDATE_ROLLBACK
- UPDATING

4.1.3. Mapping of States

As part of the service assurance that you implement, you might need to watch for specific types of state changes, and for that reason, you should understand the possible sequences of state changes in the system. The following tables list events along with the prior state and destination state, and the sequences that are likely.



When an application sends a GET request on ns-instance, the return contains values in the "state" variable for src-state (source state) and dst-states (destination states). Notifications are generated for these state-transitions. Your application must ignore states that are not needed while capturing and using the states for which you require action.

4.1.4. Active States

Table 16. Events and associated states

	Event	Src-State	Dst-State
ns-Instantiate			
	Instantiate	pre-init	instantiating
	instantiate__success	instantiating	instantiated
	instantiate__error	instantiation__rollback	instantiation__rollback
	rollback__success	instantiation__rollback	error
ns-Start			
	start	instantiated	starting
	start__success	starting	active
	start__error	starting	start__rollback
	rollback__success	start__rollback	instantiated
	rollback__failure	start__rollback	error
ns-update			
	update	active	updating
	update__success	updating	active
	update__error	updating	update__rollback
	rollback__success	update__rollback	error
	rollback__failure	update__rollback	error
ns-configure			
	configure	active	configuring
	configure__success	configuring	active
	configure__error	configuring	configure__rollback
	rollback__success	configure__rollback	active
	rollback__failure	configure__rollback	error

4.1.5. Stop and Terminate

Table 17. Stop, termination and associated states

	Event	Src-State	Destination-State
ns-stop			
	stop	active	stopping
	stop__success	stopping	instantiated
	stop__error	stopping	stop__rollback
	rollback__success	stop__rollback	error
	rollback__failure	stop__rollback	error
ns-terminate			
	terminate	instantiated	terminating

	terminate	active	terminating
	terminate	error	terminating
	terminate_success	terminating	terminated
	terminate_error	terminating	terminate_rollback
	rollback_success	terminate_rollback	error
	rollback_failure	terminate_rollback	error
ns-stop-and-terminate			
	stop	active	stopping
	stop_success	stopping	instantiated
	stop_error	stopping	stop_rollback
	rollback_terminate_stop_success	stop_rollback	error
	rollback_terminate_stop_failure	stop_rollback	error
	terminate	instantiated	terminating
	terminate_success	terminating	terminated
	terminate_error	terminating	terminate_rollback
	rollback_terminate_stop_success	terminate_rollback	error
	rollback_terminate_stop_failure	terminate_rollback	error

4.2. Alerts and Alarms

The exchange name used in this section is: **csp.vnfalertevents.exchange**.

Alarms are generated each time there is a host failure or a failure for a network service.

4.2.1. Typical Alerts and Alarms

The following examples illustrate typical alerts and alarms.

Host Failure Alarm

```
{
  "input": {
    "event": "{ \"event_description\": \"PING CRITICAL - Packet loss = 100%\",
    \"vnf_id\": \"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\",
    \"event_template\": \"hostalive\",
    \"ip\": \"10.102.82.5\",
    \"object_type\": \"networkservice\",
    \"host_name\": \"10.102.82.35-vsrx-space_firewall\",
    \"object_type_id\": \"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\",
    \"time\": \"2016-08-18 12:51:47\",
    \"event_state\": \"DOWN\",
    \"event_state_id\": \"1\"}"
  }
}
```

Host Success Alarm After Failure Alarm

```
{
  "input": {
    "event": "{\\"event_description\\":\\"PING OK - Packet loss = 0%, RTA = 2.72
ms\\",
    \\"vnf_id\\": \\"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\\",
    \\"event_template\\":\\"hostalive\\",
    \\"ip\\": \\"10.102.82.5\\",
    \\"object_type\\":\\"networkservice\\",
    \\"host_name\\":\\"10.102.82.35-vsrx-space_firewall\\",
    \\"object_type_id\\":\\"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\\",
    \\"time\\": \\"2016-08-18 10:52:07\\",
    \\"event_state\\":\\"UP\\",
    \\"event_state_id\\": \\"0\\"}"
  }
}
```

Service Failure Alarm

```
{
  "input": {
    "event": "{\\"event_description\\":\\"Critical:The ge interface 0/0/0 is
down\\",
    \\"vnf_id\\": \\"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\\",
    \\"event_template\\":\\"left_net_interface_status\\",
    \\"ip\\": \\"10.102.82.5\\",
    \\"object_type\\":\\"networkservice\\",
    \\"host_name\\":\\"10.102.82.5-vsrx-space_firewall\\",
    \\"object_type_id\\":\\"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\\",
    \\"time\\": \\"2016-08-22 15:41:40\\",
    \\"event_state\\":\\"CRITICAL\\",\\"event_state_id\\": \\"2\\"}"
  }
}
```

Service Success After Failure Alarm

```

{
  "input": {
    "event": "{\"event_description\":\"OK:The ge interface 0/0/0 is up\",
    \"vnf_id\": \"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\",
    \"event_template\":\"left_net_interface_status\",
    \"ip\": \"10.102.82.5\",
    \"object_type\":\"networkservice\",
    \"host_name\":\"10.102.82.5-vsr-x-space_firewall\",
    \"object_type_id\":\"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\",
    \"time\": \"2016-08-22 15:45:40\",
    \"event_state\":\"OK\",
    \"event_state_id\": \"0\"}"
  }
}

```

The following table lists parameters for events and alarms:

Table 18. Params for events and alarms

event	complete message of event will be a string in json format
event_description	Description of the event data
vnf_id	Associated VNF ID
event_template	Event template name
hostalive	Identifier template to verify whether host is reachable
servicechecktemplatename	Other than hostalive, are service check
event_state	if event_template=hostalive, UP/DOWN
servicecheck events	CRITICAL,OK,UNKNOWN
hostname	IP_Address-IMAGE_NAME-VNF. combination of IP address, image name and VNF name
object_type_id	Network service UUID
time	Time of event creation
event_state_id	number which represents UP,DOWN,CRITICAL,OK,UNKNOWN



Any value for **event_template** other than **hostalive** indicates a service failure event.

Conditions for service failures are as follows:

- Nat_config is disabled
- Firewall config is disabled
- UTM config is disabled
- RE control plane memory usage of a vsrx is > 95
- RE System CPU is greater than 95
- Routing load average is greater than 90

- System free memory of a virtual device is less than 10
- Failed sessions is greater than 10000
- GE interface 0/0/1 and 0/0/0 is DOWN

The system makes the following event_templates available:

- check_flowd
- vsrx_activesessions
- vsrx_failedsessions
- vsrx_system_uptime
- system_memory
- routing_engine_ctrlplane_memusage
- routing_engine_system_cpu
- routing_engine_load_average
- left_net_interface_status
- right_net_interface_status
- left_net_interface_input_pkt_rate
- left_net_interface_output_pkt_rate
- right_net_interface_input_pkt_rate
- right_net_interface_output_pkt_rate
- vsrx_nat_config
- vsrx_firewall_config
- vsrx_utm_config
- vsrx_dpi_config
- iptable_status
- iptable_system_uptime
- cisco_left_interface_status
- cisco_right_interface_status
- cisco_left_input_packets
- cisco_left_output_packets
- cisco_right_input_packets
- cisco_right_output_packets
- cisco_system-uptime
- cisco_activesessions

4.3. Events Sequences

Events can only take place in a specific set of sequences. The following tables list the possible destination events per source event.

Table 19. ns-instantiate

Source event	Destination event	Description
pre-init	instantiating	Provisioning of VNF's in process on VIM and base-configuration is being pushed to VNF's
instantiating	instantiated	VNF's are provisioned with base configuration successfully
instantiating	instantiation_rollback	Due to internal failure (VNF's not provisioned on VIM/base config not successfully pushed to VNF's) rollback is triggered to clean resources on VIM and records in internal to system
instantiation_rollback	pre-init	Clean-up activity is success
instantiation_rollback	error	clean-up activity is failure (may be some stale resources still present on VIM/connectivity to cleanup)

Table 20. ns-start

Source event	Destination event	Description
instantiated	starting	service configuration to be pushed to VNF's and service policy/chain in process of creation
starting	active	Network service is started and data path is enabled
starting	start_rollback	Due to some failure (service config not successfully pushed to VNF's/service chain creation failure) rollback is triggered
start_rollback	instantiated	state of network service is roll-backed to previous state and will be in instantiated state i.e., VNF's with only base configuration
start_rollback	error	clean-up activity failed

Table 21. ns-update

Source event	Destination event	Description
active	updating	in process of updating network service due to addition/deletion of VNF's)change in nsd-package or service policy changes or parameter changes)
updating	active	network service is successfully update as per new nsd-package with new VNF's having base and service configuration
updating	update_rollback	rollback, triggered by a failure (VNF's not provisioned on VIM/base/service config not successfully pushed to VNF's)
update_rollback	error	System unable to restore previous state of network service in update phase due to a failure, so moving to error state

Source event	Destination event	Description
update_rollback	error	System unable to restore previous state of network service in update phase due to a failure, so moving to error state

Table 22. ns-configure

Source event	Destination event	Description
active	configuring	vnf's are being modified with new base/service configuration
configuring	active	configuring of vnf's is success
configuring	configure_rollback	configuring of vnf's failed, so reverting newly modified configuration on vnf's
configure_rollback	active	vnf's are in previous state
configure_rollback	error	reverting of newly modified configuration from vnf's failed

Table 23. ns-stop

Source event	destination event	Description
active	stopping	service configuration is being removed from VNF's and service policy/chain is in process of deletion
stopping	instantiated	state of network service is in instantiated state i.e., VNF's with only base configuration and disabled datapath
stopping	stop_rollback	Due to some failure (failure on VIM or microservices) rollback is triggered
stop_rollback	error	System cannot restore network service in stopping phase to previous state due to any failure so moving to error state
stop_rollback	error	System cannot restore network service in stopping phase to previous state due to a failure, so moving to error state

Table 24. ns-terminate

Source event	Destination event	Description
instantiated	terminating	in process of termination of provisioned VNF's from VIM
active	terminating	in process of termination of provisioned VNF's from VIM
error	terminating	in process of termination of provisioned VNF's from VIM
terminating	terminated	all resources are cleaned from VIM and from other microservices
terminating	terminate_rollback	failure in cleaning up of resources
terminate_rollback	error	System cannot restore network service in terminating phase to previous state due to a failure, so moving to error state

Source event	Destination event	Description
terminate_rollback	error	System cannot restore network service in terminating phase to previous state due to a failure, so moving to error state

4.4. Summaries

You can easily get summaries of alerts and alarms and apply filters.

4.4.1. Get Alerts Summaries

Provides summary counts of all open alerts for the duration of the specified period, aggregated using specified tag **tag_name/tag_value** and severity type as follows:

- minor
- major
- critical

You can also request time-based distributions of alerts by binsize and period.

The following example query results in a response with information on hourly alerts distribution for the “us-east” region over the last 24 hours.

Send a POST to:

```
http://<csp-ms-vm>/fmpm-provider/get_alerts_summary
```

HTTP headers “X-AUTH-TOKEN: token_value” “content-type: application/json”

```
{
  "input": {
    "tag_name": "region",
    "tag_value": "us-east",
    "binsize": 1,
    "period": 1
  }
}
```

An example response:

```
{
  "output": {
    "status": "success",
    "alerts": [{
      "critical": 3,
      "major": 8,
      "minor": 15
    }]
  }
}
```

Another input example

```
{
  "input": {
    "tag_name": "region",
    "tag_value": "us-east",
    "binsize": 1,
    "period": 24
  }
}
```

A resulting response:

```
{
  "output": {
    "status": "success",
    "alerts": [{
      "critical": 3,
      "major": 8,
      "minor": 15
    },
    .....
    {
      "critical": 0,
      "major": 2,
      "minor": 5
    }]
  }
}
```

4.4.2. Top "N" Alarms

A valid request to the **top_n_alerts** endpoint returns an **ordered set** of **alerts** sorted based on the tuple including **count_critical**, **count_major** or **count_minor** of size **N** for an **entity_type** of one of the

following:

- region
- tenant
- pop
- site

The results can be filtered using **tag_name** or **tag_value**.

To obtain a listing of top alarms, send a POST to:

```
http://<csp-ms-vm>/fmpm-provider/get_top_n_alerts
```

with values for

- alarm category (count_critical, count_major, count_minor)
- time period of interest, with most recent being 1
- amount of listings to return

The following example request results in a response that lists top alerts for two regions:

```
{
  "input": {
    "entity_type": "region",
    "period": 1,
    "limit": 2
  }
}
```

Response

```
{
  "output": {
    "status": "success",
    "items": [
      {
        "name": "us-east",
        "count_critical": 10,
        "count_major": 20,
        "count_minor": 35
      },
      {
        "name": "us-west",
        "count_critical": 8,
        "count_major": 4,
        "count_minor": 15
      },
    ]
  }
}
```

The following request results in a response that contains the top 2 pops for the “us-east” region:

```
{
  "input": {
    "entity_type": "pop",
    "tag_name": "region",
    "tag_value": "us-east",
    "period": 1,
    "limit": 2
  }
}
```

Response

```
{
  "output": {
    "status": "success",
    "items": [
      {
        "name": "us-east-pop-1",
        "count_critical": 10,
        "count_major": 20,
        "count_minor": 35
      },
      {
        "name": "us-west-pop-2",
        "count_critical": 8,
        "count_major": 4,
        "count_minor": 15
      },
    ]
  }
}
```

4.5. Alert Status

You can query this to reconstruct messages as needed. For example, an input notification might resemble the following:

```
{
  "input": {
    "event": "{\"event_description\":\"OK:The interface 0/0/0 is up\",
    \"vnf_id\": \"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\",
    \"event_template\":\"left_net_interface_status\",
    \"ip\": \"10.102.82.5\",
    \"object_type\":\"networkservice\",
    \"host_name\":\"10.102.82.5-vsrx-space_firewall\",
    \"object_type_id\":\"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX\",
    \"time\": \"2016-08-22 15:45:40\",
    \"event_state\":\"OK\",
    \"event_state_id\": \"0\"}"
  }
}
```

to retrieve any lost information from the message infrastructure, construct a GET request (with auth token) to your CSO server:

```
http://<central-ha-proxy-ip>/fmpm-provider/alert_status_object
```

You can apply filters in the request by appending them to the URL as in the following example:

```
alert_status_object?filter=last_update_time<1473436110+and+last_update_time>1473435110&detail=True&size=100
```

The following json example illustrates the kind of information you can expect in a response:

```
{
  "alert_status_object": {
    "last_update_time": 1473426055,
    "alert_type": "service",
    "severity": "major",
    "start_time": 1473420641,
    "object_type": "VCPE_VNF",
    "site": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "pop": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "reason": "Critical:NAT configuration is disabled",
    "perms2": {
      "owner": "$ABCDEF123456",
      "owner_access": 0,
      "global_access": 7,
      "share": []
    },
    "network_service": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "device": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "fq_name": [
      "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX##vsrx_nat_config"
    ],
    "id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX##vsrx_nat_config",
    "tenant": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "name": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX##vsrx_nat_config",
    "display_name": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX##vsrx_nat_config",
    "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "region": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "counter": 4,
    "uri": "/fmpm-provider/alert_status_object/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "object_id": "vsrx_nat_config",
    "id_perms": {
      "enable": true,
      "uuid": {
        "uuid_mslong": 5325009751192062745,
        "uuid_lslong": 13611568844316605678
      }
    },
    "creator": "admin",
    "created": "2016-09-09T11:30:42.175820",
  }
}
```

```

    "user_visible": true,
    "last_modified": "2016-09-09T13:00:56.452609",
    "permissions": {
      "owner": "cloud-admin",
      "owner_access": 7,
      "other_access": 7,
      "group": "cloud-admin-group",
      "group_access": 7
    },
    "description": null
  }
}
}

```

Table 25. Notification request query parameters

Parameter	Description
time range	can be provided with last_update_time in UTC. last_update_time+lt+1473436110 and last_update_time+gt+1473435110
detail = False	True
True - list all attributes in response payload	size
number of alert objects in response payload	last_update_time

Table 26. Response parameters mapped to notification message

Parameter	Meta	Description
alert_type	service/ host	Mapped to host_alive template or service template
severity	Major/normal	Mapped to attribute event_state in Failure/success notification in Rabbit MQ message; For "severity" == "normal", event_state = "OK" and event_state_id = 0. For "severity" == "major", event_state = "critical" (for service) and event_state_id = 3, event_state = "DOWN" (for host) and event_state_id = 2.
object_id	Template name that is associated	For more template list "Refer section - Conditions for service failures are:"
network_service	NSID (Network service ID)	
object_type	VCPE_VNF	mapped to networkservice in notification message
id	VNF ID	For host_alive alert, the id is VNF_ID. For Service alert, the id will be VNF_ID_template_name

4.6. Monitor and Analyze Performance

Exchange name: **csp.vnfperfevents.exchange** Exchange type: **Fanout**

The following table lists the available performance metrics parameters:

Table 27. Performance metrics parameters

status	VNF Status, UP or Down
host-id	IP address of the VNF (virtual network function)
ns-id	Associated network service uuid
ifname	interface name, as in <name>/0/0/0 or <name>/0/0/1
right	right interface. Output values in packet rate
left	left interface. Input values are in packet rate
time-stamp	event created timestamp (epoch)
max-sessions	Number of active sessions
vnf-image	Image on which VNF is running, for example, vsrx
vnf	firewall,nat,utm,dpi
device-timestamp	device time stamp when queried
uptime-timestamp	VNF device system-booted time

4.6.1. Query Performance Metrics

To

Send a POST to

```
http://<csp-ms-vm>/fmpm-provider/get_perfparams
```

with a json-formatted object like one of the the following four examples:

```
{
  "input": {
    "message-data": {
      "status": "UP",
      "vnf": "firewall",
      "max-sessions": "10",
      "timestamp": "1468286911",
      "host-id": "10.102.83.1",
      "ns-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "vnf-image": "vsrx"
    }
  }
}
```



```
{
  "input": {
    "message-data": {
      "status": "UP",
      "vnf": "firewall",
      "uptime-timestamp": "1468279141",
      "timestamp": "1468286910",
      "host-id": "10.102.83.173",
      "ns-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "device-timestamp": "1468286905",
      "vnf-image": "vsrx"
    }
  }
}
```

```
{
  "input": {
    "message-data": {
      "status": "UP",
      "vnf": "firewall",
      "timestamp": "1468286913",
      "host-id": "10.102.83.96",
      "ns-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "bandwidth": [
        {
          "interface": "left",
          "output": "0 Mbps",
          "ifname": "g/0/0/0"
        }
      ],
      "vnf-image": "vsrx"
    }
  }
}
```

```
{
  "input": {
    "message-data": {
      "status": "UP",
      "vnf": "firewall",
      "timestamp": "1468286910",
      "host-id": "10.102.82.81",
      "ns-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "bandwidth": [
        {
          "interface": "right",
          "input": "0 Mbps",
          "ifname": "g/0/0/1"
        }
      ],
      "vnf-image": "vsrx"
    }
  }
}
```

4.6.2. Get a Performance Snapshot

Provides latest snapshot of performance parameters for each VNF associated with a Network-Service Id.

Send a POST to

```
http://<csp-ms-vm>/fmpm-provider/get_perfparams
```

with a json-formatted object that contains an id type along with the actual id of interest, like the following:

```
{
  "input": {
    "ns_id": "NSID-001"
  }
}
```

The response will contain information about the device and its host, like the following example:

```
{
  'output' : {
    'status': 'success',
    'ns_id': 'NSID-001'
    'vnf_params': [
      {
        'host_id': 'VNFID-001',
        'vnf_image': 'VSRX',
        'timestamp': 1459174435,
```

```

    'params':{
      'sessions': '100',
      'uptime': {'absolute': 1459174435}
      'rate': {
        'left': {
          'ifname': 'eth0',
          'input': '244',
          'output': '244'
        }
        'right': {
          'ifname': 'eth0',
          'input': '344',
          'output': '344'
        }
      }
    },
    {
      'host_id': 'VNFID-002',
      'vnf_image': 'VSRX',
      'timestamp': 1459174435,
      'params':{
        'sessions': '100',
        'uptime': {'absolute': 1459174435}
        'rate': {
          'left': {
            'ifname': 'eth0',
            'input': '244',
            'output': '244'
          }
          'right': {
            'ifname': 'eth0',
            'input': '344',
            'output': '344'
          }
        }
      }
    }
  ]
}

```

4.7. Use Service Metrics

CSO makes use of an analytics engine to handle performance metrics that you can query using the API. You can specify options in the json-formatted request body in order to customize information and formatting you will get in your responses.

Specifications can be by:

- a single time interval.
- sort specifications (including regex).
- table display (response will be json-formatted for easy import into commonly used table formatting).
- time series intervals.

Some useful fields on which you can make your query are as follows:

- `metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName`
- `metricsInstance.serviceMetricsInfo.metricBundle.metrics.functionName`
- `metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricType`
- `metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricTags`
- `metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue`
- `metricsInstance.serviceMetricsInfo.metricBundle.hostName`

You can use the following parameters in the json-formatted body of your request:



For more details, see

http://www.juniper.net/techpubs/en_US/contrail2.0/topics/task/configuration/analytics-apis-log-flow-vnc.html

In later releases we will provide more details about how to use these service assurance APIs.

4.7.1. Manage Queries and Filters

In most cases you will be sending a POST to query data that includes a start time, an end time, and one or more values for `select_fields` as summarized in the following table:

Table 28. Optional values for `select_fields`

Properties	Required/Optional	Description
<code>start_time</code>	Required	now, or time lapse to start
<code>end_time</code>	Required	time is seconds allowed for query
<code>select_fields</code>	Required	columns in result table

4.8. Service Metrics Queries

4.8.1. List Records For a Specific Time Window

Send a POST to

```
http://<csp-ms-vm>/analytics/query
```

with a json formatted object that contains the metric types that you need as in the following:

```
{
  "start_time": "now-1200m",
  "sort_fields": [],
  "end_time": "now-1180m",
  "select_fields":
  [
    "T", "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue",
    "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName",
    "metricsInstance.serviceMetricsInfo.metricBundle.hostName"],
  "table":
  "StatTable.CSOMetricsTSData.metricsInstance.serviceMetricsInfo.metricBundle.metrics",
  "where": [[{"suffix": null, "value2": null,
  "name": "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName",
  "value": "", "op": 7}]]
}
```

Example Response

```

{
  "value": [
    {
      "T": 1468333043459057,
      "metricsInstance.serviceMetricsInfo.metricBundle.hostName":
"10.213.10.121",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName":
"/vsrx/interfaces/left/g/0/0/0/stats/input",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue":
0
    },
    {
      "T": 1468333043459057,
      "metricsInstance.serviceMetricsInfo.metricBundle.hostName":
"10.213.10.122",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName":
"/vsrx/system/uptime-absolute",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue":
3
    },
    {
      "T": 1468333043459057,
      "metricsInstance.serviceMetricsInfo.metricBundle.hostName":
"10.213.10.123",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName":
"/vsrx/interfaces/right/g/0/0/1/stats/output",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue":
0
    }
  ],
}

```

4.8.2. Get a Count With Max, in Specified Intervals

You can set the interval, in seconds, to any integer value. The following example sets the interval at 30 seconds [T=30] for the specified host.

Send a POST to:

```
http://<csp-ms-vm>/analytics/query
```

with a json formatted object that contains the metric types that you need as in the following:

```
{
  "start_time": "now-1200m",
  "sort_fields": [],
  "end_time": "now-1180m",
  "select_fields":
  ["T=30",
  "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue",
  "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName",
  "COUNT(metricsInstance.serviceMetricsInfo.metricBundle)",
  "MAX(metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue)"],
  "table":
  "StatTable.CSOMetricsTSData.metricsInstance.serviceMetricsInfo.metricBundle.metrics",
  "where": [[{"suffix": null, "value2": null,
  "name": "metricsInstance.serviceMetricsInfo.metricBundle.hostName",
  "value": "XX.XXX.XX.XXX", "op": 7}]]
}
```

Example response:

```
{
  "value": [
    {
      "T=": 1468334640000000,
      "metricsInstance.serviceMetricsInfo.metricBundle.hostName": "10.213.10.121",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName":
      "/vsrx/interfaces/right/g/0/0/1/stats/input",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue": 0,
      "COUNT(metricsInstance.serviceMetricsInfo.metricBundle)": 1,
      "MAX(metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue)":
0
    },
    {
      "T=": 1468334640000000,
      "metricsInstance.serviceMetricsInfo.metricBundle.hostName": "10.213.10.121",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName":
      "/vsrx/interfaces/right/g/0/0/1/stats/output",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue": 0,
      "COUNT(metricsInstance.serviceMetricsInfo.metricBundle)": 1,
      "MAX(metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue)":
0
    },
  ],
}
```

4.8.3. Regular-expression-matching Payload

You can send a request that initializes a search on regular expressions by sending a payload that specifies search parameters.

Send a POST to:

```
http://<csp-ms-vm>/analytics/query
```

with json-formatted data that indicates sort and/or filter parameters. Following is an illustrative example:

```
{
  "start_time": "now-1200m",
  "sort_fields": [],
  "end_time": "now-1180m",
  "select_fields":
    ["T",
     "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue",
     "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName",
     "metricsInstance.serviceMetricsInfo.metricBundle.hostName"],
  "table":
    "StatTable.CSOMetricsTSDData.metricsInstance.serviceMetricsInfo.metricBundle.metrics",
  "where": [[{"suffix": null, "value2": null,
    "name": "metricsInstance.serviceMetricsInfo.metricBundle.hostName",
    "value": "10.213.10.121", "op": 7}]],
  "filter": [[{"name":
    "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName",
    "value": "/vsrx/system*", "op": 8}]]
}
```

Example response:

```
{
  "value": [
    {
      "T": 1468333043459057,
      "metricsInstance.serviceMetricsInfo.metricBundle.hostName":
        "10.213.10.121",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricName":
        "/vsrx/system/uptime-absolute",
      "metricsInstance.serviceMetricsInfo.metricBundle.metrics.metricValue":
        3
    },
  ],
}
```


4.8.4. Filters

You can choose between two ways of running filtered searches.

- by sending filter parameters directly, using the REST query parameters.
- by sending filter parameters using a REST request body.

For simple filters you might like the convenience of using REST query parameters directly.

Especially when using complex filters, using the request body method has important advantages:

- greater flexibility.
- increased refinement in expression.
- easy-to-read JSON format.

4.8.5. URI and JSON-formatted Filters

URI Query Parameter Filter

A good example of a simple query is getting information related to a device name.

A request like the following returns the device named 'test_device':

```
$ curl -s 'http://<csp-ms-vm>/ems-regional/device'?filters=display_name=="test_device"
```



Even when you can filter on a specified field, that field might **not** exist in the response output of the collections API. For example, returning a 'display_name' in response to some types of queries is optional, however returning 'display_name' is required for queries of a single device.

FQName Query Filter

Following is an example curl request that filters on a FQName:

```
curl -s 'http://<csp-ms-vm>/ems-regional/device'?fq_name_str=default-domain:default-project:mx100
```



The FQName filter cannot be used in conjunction with other filters. If other filters are provided in an FQName query, the additional filters are ignored.

Query Secondary Collections

When there is a dependency of one collection on another (a secondary collection) we can use special query parameters. This applies to the following cases:

- Querying all sites for a customer
- Querying bulk collections

Get Child Objects With Details

Use the following to query all sites (has-edge) for a customer (for more information, you can refer to 'tssm.yang' in the API reference section):

```
/tssm/site?parent_id=<cust_uuid>&detail=True
/tssm/site?obj_uuids=<site1_uuid>,<site2_uuid>&detail=True
```

Use the POST Query

When the uuid list is too long for a GET request, you have the option of using a POST query. The same set of query params described above can be used in the POST body to the following endpoint:

```
/tssm/list-bulk-collection
```

The body should resemble the following:

```
{
  "type": "site",
  "obj_uuids": "471d3d16-874e-4698-9cc5-3729f0186970,XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "detail": true
}
```

Get Expanded Refs

The following example request illustrates a query that returns all customers referencing the profile profiles(ref-edge) or pop(ref-edge)☒:

```
/tssm/customer\?back_ref_id=<pop_uuid>
```

GET specific fields from an object with a request like the following example:

```
/tssm/customer?fields=subnet,tenant_type,pop_refs,corp_transit_networks
```

Where subnet (prop), tenant_type (prop), pop_refs (ref), corp_transit_networks (child)



This does not act recursively—it cannot get details about 'pop_ref' or 'corp_transit_networks'

4.8.6. Extended Filter With Elasticsearch Integration

We support extended filtering for use with elasticsearch integration. The filter parameters use a similar syntax to the syntax used for SQL.

Supported operands are:

```
and, or, lt, lte, gt, gte, >, >=, <, <=, ==, !=, like, eq, match
```

For example, to query the first 10 active devices starting from the first, sorting on 'display_name' in ascending order and retrieving only devices with 'display_name = "test_device"'.

```
$ curl -s 'http://</ems-  
regional>/device'?from=1&size=10&sorter=display_name:asc\&filters=display_name=="t  
est_device"&management_state=="ACTIVE"
```



Page size defaults to 1000 unless specified.

Elasticsearch using POST body

Elasticsearch using POST body is only available on servers that use the elastic-search database, like the server that you would use for **data-view-central**.

Queries use the native **Query DSL** that Elasticsearch uses, by sending a POST request to the following endpoint:

```
'http://127.0.0.1:8082/<your-module-name>/<your-vertex-name>/_filter'
```

Header:

```
Content-Type: application/json
```

Body:

```
<your-query-request-body>
```

Suggest API

The suggest feature suggests similar looking terms based on a provided text.

Send a POST to a suggest endpoint using the following pattern:

```
'http://<csp-ms-vm>/<your-module-name>/_suggest'
```

Count API

The Count API allows you to easily send a request that gets the number of matches for that query. Following are examples that illustrate use of the Count API:

```
curl -s \
-H "Content-Type: application/json" \
-d '<your-query-request-body>' \
'http://<csp-ms-vm>/<your-module-name>/<your-vertex-name>/_filter?count=true'
```

```
curl -s 'http://<csp-ms-vm>/<your-module-name>/<your-vertex-name>/_?from=1&size=10&sorter=<field-name>:asc&filter=((<field-name> <= 20) and (<field-name> = <query-string>))'
```

Fault Management Micro-service

The Fault Management (FMPM) micro-service maintains a history of all faults using:

- first class objects called **alert_object**.
- identification of fault status using **alert_status_object**.

When a device fails and then comes back up fine, the FMPM responds as follows:

1. Device fails.
 - * One **alert_object** will be created with severity as "critical."
 - * One **alert_status_object** will be created with severity as "critical."
2. Device restarts.
 - * Another **alert_object** is created with severity as "normal" (indicates "clearing").
 - * Previous "alert_status_object" is modified and following fields will be updated accordingly – severity ("normal"), last_update_time (as the second timestamp) and counter (2).

An example **alert_status_object**:

```
{
  "object_type": "UCPE_DEVICE",
  "alert_type": "host",
  "alert_origin": "host",
  "severity": "critical",
  "start_time": 1465910341,
  "reason": "Down",
  "id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "object_id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "device": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "tenant": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "region": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "site": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "pop": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
}
```

After generating a fault, the FMPM micro-service processes it using a rule-based approach, with four main components:

- **Match Functions**. Logical functions that return either True or False. Input to these function is the **alert_status_object**.
- **Context** Handled using **rule_context**, a mechanism to allow action functions all the information needed to

perform a specific task. **rule_context** contains environment variables along with the opaque data with which the associated rule was created and an **alert_status_object**; it can be passed to a rule with a set of parameters that is then transparently passed to action functions during execution,

- **Rules.** Tie **match** functions to a list of **actions**. It also has an explicit **priority** field that allows multiple **action** lists to be executed for a specified **alert_status_object**. Higher priority rules are evaluated/executed before those of lower priority.
- **Action Functions.** Action implementation based on rules like UUID resolution or publishing to internal and/or external RabbitMQ exchange(s).

Pre-defined Functions

You can use the pre-defined functions as-is, and also create new rules by using combinations of the pre-defined functions.

Following is a list of Pre-defined match functions:

- match_severity_all
- match_severity_critical
- match_severity_not_critical
- match_severity_major
- match_severity_not_major
- match_severity_normal
- match_severity_not_normal
- match_alert_type_host
- match_alert_type_service
- match_object_type_UCPE_DEVICE
- match_object_type_UCPE_VNF

Following is a list of pre-defined actions functions:

- alert_action_resolve_uuids
- alert_action_send_to_rmq
- alert_action_send_to_external_rmq
- alert_action_discard

By default FMPM seeds two rules, UUID Resolution –

- Priority = 1000
- Match Function = match_severity_all
- Action Functions = [alert_action_resolve_uuids]

Publish to Internal RabbitMQ exchange:

- Priority = 900
- Match Function = match_severity_all
- Action Functions = [alert_action_send_to_rmq]

Example JSONs for Rules

Match Function

Method: HTTP POST

URL: /fmpm-provider/rule_matchers

```
{
  "rule_matchers": {
    "function": {
      "function": "match_severity_all",
      "module_path": "dummy",
      "module_name": "alert_match_functions"
    },
    "text": "match_severity_all",
    "fq_name": "match_severity_all",
    "uuid": "f7885982-1cdd-422a-ac90-5c082bee2f90"
  }
}
```

Action Function

Method: HTTP POST

URL: /fmpm-provider/rule_actions

```
{
  "rule_actions": {
    "function": {
      "function": "alert_action_send_to_rmqs",
      "module_path": "dummy",
      "module_name": "alert_actions"
    },
    "text": "alert_action_send_to_rmqs",
    "fq_name": "alert_action_send_to_rmqs",
    "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

Rule - UUID Resolution

Method: HTTP POST

URL: /fmpm-provider/rules

```
{
  "rules": {
    "fq_name": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "name": "rule uuid resolve",
    "text": "UUID resolution rule",
    "actions": ["XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"],
    "priority": 1000,
    "match": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

Rule – Publish to External RabbitMQ

Method: HTTP POST

URL: /fmpm-provider/rules

```
{
  "rules": {
    "fq_name": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "name": "post to ext service",
    "text": "post to external rmq for match alert type service",
    "actions": ["XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"],
    "priority": 50,
    "match": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "rule_context": {
      "broker_ip": "10.213.17.76",
      "broker_port": "5672",
      "exchange_type": "topic",
      "user": "guest",
      "password": "guest"
    }
  }
}
```

Please note the use of “rule_context” in this rule definition.

An example of fault object after rule engine execution* –

```
{
  "object_type": "UCPE_DEVICE",
  "alert_type": "service",
  "severity": "major",
  "alert_origin": "service",
  "start_time": 1465910341,
  "id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX##/JCP/interfaces/ge-0/0/3/status",
  "device": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "site": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "site_display_name": "TestSite",
  "pop": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "pop_display_name": "TestPop",
  "tenant": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "tenant_display_name": "TestProject",
  "region": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
  "region_display_name": "TestRegional"
}
```

4.9. Network Service Life Cycle Event Message Flows

The following sections contain example messages that illustrate the flow of commonly used state change messages.

4.9.1. Network Service Message Flow From PRE-INIT to ACTIVE

States:

- PRE-INIT
- INSTANTIATING
- RESUMING-INstantiate-START
- INSTANTIATED
- STARTING
- ACTIVE

These messages illustrate what you might see in sequential order from the point of beginning an instantiation to active state, with minor interruptions that trigger instantiation restarts:

Pre-init to Instantiating

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:04:32.985090",
    "state": "INSTANTIATING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "PRE-INIT"
  }
}
```

Instantiating to Resuming-instantiate-start


```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:05:58.747853",
    "state": "RESUMING-INSTANTIATE-START",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "INSTANTIATING"
  }
}
```

Resuming Instantiate-start to Instantiating

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:05:59.588597",
    "state": "INSTANTIATING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "RESUMING-INSTANTIATE-START"
  }
}
```

Instantiating to Instantiated

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:09:55.275321",
    "state": "INSTANTIATED",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "INSTANTIATING"
  }
}
```

Instantiated to Starting

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:09:56.580130",
    "state": "STARTING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "INSTANTIATED"
  }
}
```

Starting to Resuming Instantiate-start

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:10:29.824214",
    "state": "RESUMING-INstantiate-START",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "STARTING"
  }
}
```

Resuming Instantiate-start to Instantiating

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:10:30.949579",
    "state": "INSTANTIATING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "RESUMING-INstantiate-START"
  }
}
```

Instantiating to Instantiated

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:10:44.617194",
    "state": "INSTANTIATED",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "INSTANTIATING"
  }
}
```

Instantiated to Starting

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:10:46.354920",
    "state": "STARTING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "INSTANTIATED"
  }
}
```

Starting to Started

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:10:47.866127",
    "state": "ACTIVE",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "STARTING"
  }
}
```

4.9.2. Service Message Flow from Active to Terminated

States:

- ACTIVE
- TERMINATING
- RESUMING-TERMINATE
- TERMINATED

The following messages illustrate what you might see for a termination process that has a minor interruption:

Active to Terminating

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:15:25.172566",
    "state": "TERMINATING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "ACTIVE"
  }
}
```

Terminating to Resuming-terminate

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:16:14.013354",
    "state": "RESUMING-TERMINATE",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "TERMINATING"
  }
}
```

Resuming-terminate to Terminating

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:16:15.457990",
    "state": "TERMINATING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "RESUMING-TERMINATE"
  }
}
```

Terminating to Terminated

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 19:16:27.610800",
    "state": "TERMINATED",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "TERMINATING"
  }
}
```

4.9.3. Service Messages During Update

Active to updating

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 20:35:31.256283",
    "state": "ACTIVE",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "UPDATING"
  }
}
```

Updating to Active

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 20:29:38.506799",
    "state": "UPDATING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "ACTIVE"
  }
}
```

Updating to Resuming

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 20:31:42.562257",
    "state": "UPDATING",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "RESUMING-UPDATE"
  }
}
```

Resuming to Active

```
{
  "input": {
    "ns-instance-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "sequence-number": "0",
    "timestamp": "2016-08-23 20:31:40.447591",
    "state": "RESUMING-UPDATE",
    "ns-instance-url":
      "/restconf/data/maestro/nfv-instances/ns-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "old-state": "UPDATING"
  }
}
```

```
{
  "<suggest-name>" : {
    "text" : "<suggest-text>",
    "completion" : {
      "field" : "<suggest-field-name>",
      "size":<number of suggestions>
    }
  }
}
```

Chapter 5. Code examples

We are providing these request examples for your convenience. They make use of the same data that was used in the tutorial.

5.1. Authentication

After authentication, copy the value for X-auth-select in the response header to use as the auth token.

5.1.1. HTTP

```
POST /v3/auth/tokens HTTP/1.1
Host: XX.XXX.XX.XXX:5000
Content-Type: application/json
Authorization: Basic $ABCDEF123456
{ "auth": {
    "identity": {
        "methods": ["password"],
        "password": {
            "user": {
                "name": "admin",
                "domain": { "id": "default" },
                "password": "contrail123"
            }
        }
    },
    "scope": {
        "project": {
            "name": "admin",
            "domain": { "id": "default" }
        }
    }
}}
```

5.1.2. cURL


```
curl -X POST -H "Content-Type: application/json"
-H "Authorization: Basic $ABCDEF123456"
'{ "auth": {
  "identity": {
    "methods": ["password"],
    "password": {
      "user": {
        "name": "admin",
        "domain": { "id": "default" },
        "password": "contrail123"
      }
    }
  },
  "scope": {
    "project": {
      "name": "admin",
      "domain": { "id": "default" }
    }
  }
}}' "http://1XX.XXX.XX.XXX/v3/auth/tokens"
```

5.2. Import POP

Importing a POP has the following results:

- Creates a POP object in the topology
- Creates a vim object in the NSO, the VIM regional service and the topology service
- Creates a Resource pool object in the NSO and the vim regional service
- References the topovim in the topo POP
- Topo.vim.db_id = regionalVim.vim.uuid
- Topo.vim.resource_pool = regionalVim.resourcepool.uuid
- Topo.pop.properties has mgmt_net_id value (vl-id in NSO)
- Creates an admin tenant and domain in the vim microservice
- Issues Pnf-discover to NSO for device discovery
- Updates the pnf-instance id in topo.device properties

5.2.1. HTTP

```
POST /topology-service/import-pop HTTP/1.1
```

Header:

```
Host: <csp-ms-vm>
x-auth-token: $ABCDEF123456
content-type: application/json
```

```
{
  "input": {
    "job_name_prefix": "import_pop",
    "pop": [
      {
        "dc_name": "regional",
        "name": "pop-ems",
        "address": {
          "street": "steet",
          "city": "city",
          "state": "CA",
          "zip_code": "XXXXX",
          "country": "USA"
        },
        "vim": [
          {
            "name": "vim-ems",
            "vim_type": "cloud",
            "cloud": {
              "address": "xx.xxx.xx.xxx",
              "auth_url": "http://XX.XXX.XX.XXX:5000/v3",
              "default_domain": "Default",
              "password": "pwd",
              "default_tenant": "admin",
              "username": "admin",
              "resource_pool": [
                {
                  "name": " SFO-AZ ",
                  "compute_zone": " SFO-AZ "
                }
              ]
            },
            "mgmt_network": {
              "vld_name": "mgmt",
              "vl_name": "mgmt-net",
              "onboard": true,
              "route_target": ["8887:887"],
              "subnet": ["XX.XXX.XX.XXX/23"]
            }
          }
        ]
      }
    ]
  },
}
```

```

    "device": [
      {
        "name": "pnf-ems",
        "device_ip": "XX.XXX.XX.XXX",
        "pnf_package": "juniper-mx",
        "assigned_device_profile": "SDN-GW-MX",
        "authentication": {
          "password_based": {
            "username": "root",
            "password": "pwd"
          }
        }
      }
    ]
  }
]
}

```

The above code example uses one of the two options available for the authentication object. Following is an example of the second option:

```

"authentication": {
  "userid": "XXXXXXX"
}

```

5.2.2. cURL

```

curl -X POST -H "x-auth-token: $ABCDEF123456"
-H "content-type: application/json"

```

JSON Body

A typical JSON body for an import POP request to:

```

http://xx.xx.xx.xx/topology-service/import-pop

```

```

{
  "input": {
    "job_name_prefix": "import_pop",
    "pop": [
      {
        "dc_name": "regional",

```

```

"name": "pop-ems",
"address": {
  "street": "street",
  "city": "city",
  "state": "CA",
  "zip_code": "XXXXX",
  "country": "USA"
},
"vim": [
  {
    "name": "vim-ems",
    "vim_type": "cloud",
    "cloud": {
      "address": "XX.XXX.XX.XXX",
      "auth_url": "http://XX.XXX.XX.XXX:5000/v3",
      "default_domain": "Default",
      "password": "contrail123",
      "default_tenant": "admin",
      "username": "admin",
      "resource_pool": [
        {
          "name": " SFO-AZ ",
          "compute_zone": " SFO-AZ "
        }
      ]
    },
    "mgmt_network": {
      "vld_name": "mgmt",
      "vl_name": "mgmt-net",
      "onboard": true,
      "route_target": ["8887:887"],
      "subnet": ["XX.XXX.XX.XXX/23"]
    }
  }
],
"device": [
  {
    "name": "pnf-ems",
    "device_ip": "XX.XXX.XX.XXX",
    "pnf_package": "juniper-mx",
    "assigned_device_profile": "SDN-GW-MX",
    "authentication": {
      "password_based": {
        "username": "root",
        "password": "XXXXXX"
      }
    }
  }
]

```

```

    }
  ]
}
}
}

```

5.3. Onboard Tenants

A successful tenant onboarding results in the following actions:

- Creates a Tssm customer
- Creates a Tssm site
- Creates a Topo site
- Stores Corp_trans_net_id in topo dc_site properties
- Stores Left rt and left subnet in topo cloud_site properties
- Creates a customer admin user

POST to:

```
http://<csp-ms-vm>/tssm/onboard-tenant
```

We are providing several examples that illustrate how json-formatted data could be constructed in response to commonly encountered situations.

5.3.1. Onboard With App_point

Use the above onboard-tenant request url with data in the json body like the following example:

```

{ "input":
  {
    "tenant_name" : "vcpe-customer",
    "tenant_admin" : {
      "admin_user_name" : "cust_admin", ①
      "admin_user_password" : "cust_admin"
    },
    "tenant_type" : "default",
    "managed_wan_topology": {
      "network": [
        {
          "network_name": "vcpe-l3vpn",
          "site": [
            {
              "site_name" : "vcpe-bllore",
              "site_description" : "vCPE payload ",
              "location" : {
                "street": "site1 street",
                "city": "site1 ciity",
                "state": "site1 state",
                "zip_code": "99990",
                "country" : "some country"
              },
              "cloud_site_info" :{
                "pop_info" : {
                  "pop_name" : "vcpe-pop",
                  "route_target" : "8889:889", ②
                  "left_virtual_networks": [
                    { "right_network_name": "INTERNET", "subnet":
["1xx.xxx.xx.xxx/xx"]} ③
                  ]
                },
                "internet_info": {
                  "route_target" : "8889:889",
                  "subnet": ["xx.xxx.xx.xxx/xx"]
                }
              }
            }
          ]
        }
      ]
    }
  }
}

```

① Customer admin creation with role *member*.

- ② Store as left-rt and used as-is during instantiation.
- ③ Store as left-subnet-cidr and use as-is during instantiation.

Response:

```
{ "output": { "status": "in-progress", "reason": null, "jobid": "052fa3f3-20cc-4629-8419-500140de1263" }}
```

5.3.2. App_point – Site-vpn

Use the above onboard-tenant request with data in json body like the following example:

```
{ "input":
  {
    "tenant_name" : "cloud-dc-vpn",
    "tenant_admin" : {
      "admin_user_name" : "cloud-dc_admin",
      "admin_user_password" : "cloud-dc_admin"
    },
    "tenant_type" : "default",
    "managed_wan_topology": {
      "network": [
        {
          "network_name": "cloud-dc-vpn-l3vpn",
          "site": [
            {
              "site_name" : "cloud-dc-vpn-pleaston",
              "site_description" : "vCPE payload ",
              "location" : {
                "street": "site1 street",
                "city": "site1 city",
                "state": "site1 state",
                "zip_code": "99990",
                "country" : "some country"
              },
              "cloud_site_info" : {
                "pop_info" : {
                  "pop_name" : "vcpe-pop",
                  "route_target" : "8889:889",
                  "left_virtual_networks": [
                    { "right_network_name": "cloud-dc-corp-sunnyvale",

```

```

    },
    {
        "site_name" : "cloud-<name>",
        "site_description" : "UCPE payload ",
        "properties": {"property": [{"name": "cust_prop1", "value"
: "cust_val1"}, {"name": "cust_prop2", "value": "cust_v2"}]},
        "location" : {
            "street": "site1 street"
        },
        "data_center_site_info" : {
            "pop_name" : "vcpe-pop",
            "route_target" : "8889:889",
            "subnet": ["xx.xxx.xx.xxx/xx"]
        }
    }
]
}
]
}
}
}

```

5.3.3. App_point – Customer-internet

Use the above onboard-tenant request with data in json body like the following example:


```

{ "input":
  {
    "tenant_name" : " cust-int",
    "tenant_admin" : {
      "admin_user_name" : "cust-int_admin",
      "admin_user_password" : "cust-int_admin"
    },
    "tenant_type" : "default",
    "managed_wan_topology": {
      "network": [
        {
          "network_name": "cust-int-l3vpn",
          "site": [
            {
              "site_name" : "cust-int-sj",
              "site_description" : "vCPE payload ",
              "location" : {
                "street": "site1 street",
                "city": "site1 ciity",
                "state": "site1 state",
                "zip_code": "99990",
                "country" : "some country"
              },
              "data_center_site_info" :{
                "pop_name": " vcpe-pop ",
                "route_target" : "8889:887",
                "subnet": ["XX.XXX.X.X/24"],
                "internet_info": {
                  "route_target" : "8889:886",
                  "subnet": ["XX.XXX.X.X/XX"]
                }
              }
            }
          ]
        }
      ]
    }
  }
}

```

5.3.4. Onboard Tenant With All Sites Pointing to a Single vLink



For this, one and only one internet vlink should be created for the customer, and the rt/subnet for internet have the same values.

Use the above onboard-tenant request with data in json body like the following example:

```

{ "input":
  {
    "tenant_name" : "cust-vcpe",
    "tenant_admin" : {
      "admin_user_name" : "cust_admin",
      "admin_user_password" : "cust_admin"
    },
    "tenant_type" : "default",
    "managed_wan_topology": {
      "network": [
        {
          "network_name": "cust-vcpe-l3vpn",
          "site": [
            {
              "site_name" : "cust-site-1",
              "site_description" : "vCPE payload ",
              "location" : {
                "street": "site1 street",
                "city": "site1 ciity",
                "state": "site1 state",
                "zip_code": "99990",
                "country" : "some country"
              },
              "cloud_site_info" :{
                "pop_info" : {
                  "pop_name" : "pop-vcpe",
                  "route_target" : "65412:778",
                  "left_virtual_networks": [
                    { "right_network_name": "INTERNET", "subnet":
["XX.XXX.X.X/24"]},
                    { "right_network_name": "cust-corp-site", "subnet":
["XX.XXX.X.X/24"]}
                  ]
                },
                "internet_info": {
                  "route_target" : "65412:776",
                  "subnet": ["xXX.XXX.X.X/XX"]
                }
              },
              {
                "site_name" : "cust-site-2",
                "site_description" : "vCPE payload ",
                "location" : {
                  "street": "site1 street",

```

```

        "city": "site1 ciity",
        "state": "site1 state",
        "zip_code": "99990",
        "country" : "some country"
    },
    "cloud_site_info" :{
        "pop_info" : {
            "pop_name" : "pop-vcpe",
            "route_target" : "65412:779",
            "left_virtual_networks": [
                { "right_network_name": "INTERNET", "subnet":
["XX.XXX.X.X/24"]}
            ]
        },
        "internet_info": {
            "route_target" : "65412:776",
            "subnet": ["XX.XXX.X.X/24"]
        }
    }
},
{
    "site_name" : "cust-corp-site",
    "site_description" : "vCPE payload ",
    "location" : {
        "street": "site1 street"
    },
    "data_center_site_info" :{
        "pop_name" : "pop-vcpe",
        "route_target" : "65412:772",
        "subnet": ["xx.xxx.xx.xxx/xx"],
        "internet_info": {
            "route_target" : "65412:776",
            "subnet": ["xx.xxx.xx.xxx/xx"]
        }
    }
}
]
}
]
}
}
}
```

5.4. Services

5.4.1. Import Two Service Profiles

This creates an `nfv-service-profile` object in tssm.

Send a POST request to:

```
http://<csp-ms-vm>/tssm/import-service-profile
```

with json-formatted information like the following in the body:

```
{
  "input": {
    "nsdid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX", ①
    "name": "Service-Site-Package"
  }
}
```

① from NSO onboarded nsd packages

A successful response contains the HTTP response code (201 Created) and the uuid of the service profile created in tssm like the following:

```
{41f15681-546a-4f42-afc8-ea0bd85bdf2d}
```

- Verify by checking if the **nfv-service-profile** object exists in tssm, by sending a POST to

```
http://<csp-ms-vm>/tssm/import-service-profile
```

with json-formatted information like the following:

```
{
  "input": {
    "nsdid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "name": "Service-Site-Package-Update"
  }
}
```

5.4.2. Response

201 Created [response will have the uuid of the service profile created in tssm]

5.4.3. Attach Service Profile to Customer in TSSM

Send a PUT request to:

```
/<csp-ms-vm>/tssm/customer/<customer-uuid>
```

with json-formatted information in the body like the following:

```
{
  "customer": {
    "fq_name": [
      "default-domain",
      " vcpe-customer ",
      " vcpe-customer "
    ],
    "nfv_service_profile_refs": [
      {
        "to": [
          "default-domain",
          "Service-Site-Package"
        ],
        "uuid": "<service-profile-uuid>",
        "attr": null,
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid>"
      },
      {
        "to": [
          "default-domain",
          "Service-Site-Package-Update"
        ],
        "uuid": "<service-profile-uuid>",
        "attr": null,
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid>"
      }
    ]
  }
}
```

A **Resp: 200 OK** indicates success.

5.4.4. Create and Start Services

When you create a service instance, you should make a note of its uuid along with other data in the RESTful response. You will need to use service instance uuid in your RESTful request to start up the service.

Create Service Instance

POST to

```
http://<csp-ms-vm>/tssm/nfv-service-instance
```

with json-formatted information in the body like the following:

```
{
  "nfv-service-instance": {
    "display_name": "vSRX_Firewall",
    "parent_type": "customer",
    "nfv_service_profile_refs": [
      {
        "to": [
          "default-domain",
          "Service-Site-Package"
        ],
        "uuid": "<service-profile-uuid>",
        "attr": null,
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid>"
      }
    ],
    "config_input": {
      "ns_start_variables": {},
      "ns_instantiation_variables": {}
    },
    "flavour": "Gold",
    "app_point": {
      "app_point_type": "site-internet",
      "app_point_path": "<tssm-site-uuid>"
    },
    "pending_attributes": {
      "flavour": "Gold",
      "nfv_service_profile": "<service-profile-uuid>"
    },
    "name": "service-site-vcpe-instance ",
    "fq_name": [
      "default-domain",
      " vcpe-customer ",
      " vcpe-customer ",
      "service-site-vcpe-instance "
    ],
    "pending_config_input": {
      "vnf_config": [
        {
          "function_config": [
            {
              "functionid": "NAT",
              "adv_config_variables": {
```

```

        "fw_policy_info": [
            {
                "src_zone": "left",
                "dst_zone": "right",
                "dst_ips": [
                    "any"
                ],
                "apps": [
                    "junos-tcp-any",
                    "junos-icmp-ping"
                ],
                "policy_name": "left-to-right",
                "src_ips": [
                    "any"
                ],
                "action": "permit"
            }
        ]
    },
    "base_config_variables": {
        "ntp_servers": [
            "1.1.1.1",
            "2.2.2.2"
        ],
        "name_servers": [
            "192.168.5.68",
            "172.17.28.101"
        ],
        "hostname": "HOSTNAME-FW",
        "left_interface": "ge-0/0/1",
        "right_interface": "ge-0/0/2"
    },
    "vnfid": "vFF"
}
]
},
"pending_final_props": {}
}
}

```

Resp 200

```
{
  "nfv-service-instance": {
    "uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "fq_name": [
      "default-domain",
      " vcpe-customer ",
      " vcpe-customer ",
      " service-site-vcpe-instance "
    ],
    "parent_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "uri": "/tssm/nfv-service-instance/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "parent_uri": "/tssm/customer/XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "name": " service-site-vcpe-instance "
  }
}
```

Start Service

POST to

```
http://<csp-ms-vm>/tssm/service-instantiate-and-start
```

with json-formatted information in the body like the following:

```
{
  "input": {
    "instance_uuid": "<tssm-nfv-service-instance-uuid>" ①
  }
}

Resp:
200
{
  "output": {
    "jobid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

① uuid of the previous object created

Modify Service Instance for Service-configure

PUT to

```
http://<csp-ms-vm>/tssm/nfv-service-instance
```


with json-formatted information the the body like the following:

```
{
  "nfv-service-instance": {
    "display_name": "vSRX_Firewall",
    "parent_type": "customer",
    "nfv_service_profile_refs": [
      {
        "to": [
          "default-domain",
          "Service-Site-Package"
        ],
        "uuid": "<service-profile-uuid>",
        "attr": null,
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid>"
      }
    ],
    "config_input": {
      "ns_start_variables": {},
      "ns_instantiation_variables": {}
    },
    "flavour": "Gold",
    "app_point": {
      "app_point_type": "site-internet",
      "app_point_path": "<tssm-site-uuid>"
    },
    "pending_attributes": {
      "flavour": "Gold",
      "nfv_service_profile": "<service-profile-uuid>"
    },
    "name": "service-site-vcpe-instance ",
    "fq_name": [
      "default-domain",
      " vcpe-customer ",
      " vcpe-customer ",
      "service-site-vcpe-instance "
    ],
    "pending_config_input": {
      "vnf_config": [
        {
          "function_config": [
            {
              "functionid": "NAT",
              "adv_config_variables": {
                "fw_policy_info": [
                  {
                    "src_zone": "left",
```

```

        "dst_zone": "right",
        "dst_ips": [
            "any"
        ],
        "apps": [
            "junos-tcp-any",
            "junos-icmp-ping"
        ],
        "policy_name": "left-to-right",
        "src_ips": [
            "any"
        ],
        "action": "reject"
    }
]
}
}
],
"base_config_variables": {
    "ntp_servers": [
        "1.1.1.1",
        "2.2.2.2",
        "3.3.3.3"
    ],
    "name_servers": [
        "3.3.3.3",
        "4.4.4.4"
    ],
    "hostname": "HOSTNAME-FW",
    "left_interface": "ge-0/0/1",
    "right_interface": "ge-0/0/2"
},
"vnfid": "vFF"
}
]
},
"pending_final_props": {}
}
}

```

Service Configure

POST to

```
http://<csp-ms-vm>/tssm/service-configure
```

with json-formatted information in the body like the following:

```
{
  "input": {
    "instance_uuid": "<tssm-nfv-service-instance-uuid>" ①
  }
}
```

① UUID of the previous object created.

Resp: 200

```
{
  "output": {
    "jobid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

Modify Service Instance

PUT to

```
http://<csp-ms-vm>/tssm/nfv-service-instance
```

with json-formatted information in the body like the following:

```
{
  "nfv-service-instance": {
    "display_name": "vSRX_Firewall",
    "parent_type": "customer",
    "nfv_service_profile_refs": [
      {
        "to": [
          "default-domain",
          "Service-Site-Package"
        ],
        "uuid": "<service-profile-uuid>",
        "attr": null,
        "uri": "/tssm/nfv-service-profile/<service-profile-uuid>"
      }
    ],
    "config_input": {
      "ns_start_variables": {},
      "ns_instantiation_variables": {}
    },
    "flavour": "Gold",
  }
}
```

```

"app_point": {
  "app_point_type": "site-internet",
  "app_point_path": "<tssm-site-uuid>"
},
"pending_attributes": {
  "flavour": "Gold",
  "nfv_service_profile": "<service-profile-uuid>"
},
"name": "service-site-vcpe-instance ",
"fq_name": [
  "default-domain",
  " vcpe-customer ",
  " vcpe-customer ",
  "service-site-vcpe-instance "
],
"pending_config_input": {
  "vnf_config": [
    {
      "function_config": [
        {
          "functionid": "NAT",
          "adv_config_variables": {
            "fw_policy_info": [
              {
                "src_zone": "left",
                "dst_zone": "right",
                "dst_ips": [
                  "any"
                ],
                "apps": [
                  "junos-tcp-any",
                  "junos-icmp-ping"
                ],
                "policy_name": "left-to-right",
                "src_ips": [
                  "any"
                ],
                "action": "reject"
              }
            ]
          }
        }
      ]
    }
  ],
  "base_config_variables": {
    "ntp_servers": [
      "1.1.1.1",
      "2.2.2.2",

```

```

        "3.3.3.3"
    ],
    "name_servers": [
        "192.168.5.68",
        "172.17.28.101"
    ],
    "hostname": "HOSTNAME-FW",
    "left_interface": "ge-0/0/1",
    "right_interface": "ge-0/0/2"
},
"vnfid": "vFF"
},
{
    "function_config": [
        {
            "functionid": "NAT",
            "adv_config_variables": {
                "fw_policy_info": [
                    {
                        "src_zone": "left",
                        "dst_zone": "right",
                        "dst_ips": [
                            "any"
                        ],
                        "apps": [
                            "junos-tcp-any",
                            "junos-icmp-ping"
                        ],
                        "policy_name": "left-to-right",
                        "src_ips": [
                            "any"
                        ],
                        "action": "reject"
                    }
                ]
            }
        }
    ],
    "base_config_variables": {
        "ntp_servers": [
            "1.1.1.1",
            "2.2.2.2",
            "3.3.3.3"
        ],
        "name_servers": [
            "192.168.5.68",
            "172.17.28.101"
        ]
    }
}

```

```

    ],
    "hostname": "HOSTNAME-FW",
    "left_interface": "ge-0/0/1",
    "right_interface": "ge-0/0/2"
  },
  "vnfid": "vFF-NAT"
}
]
},
"pending_final_props": {}
}
}

```

Service Update

POST to

```
http://<csp-ms-vm>/tssm/service-update
```

with json-formatted information in the body like the following:

```

{
  "input": {
    "instance_uuid": "<tssm-nfv-service-instance-uuid>" ①
  }
}
Resp:
200
{
  "output": {
    "jobid": "OXXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}

```

① UUID of the previous object created.

Terminate service

POST to

```
http://<csp-ms-vm>/tssm/service-terminate
```

with json-formatted information in the body like the following:

```
{
  "input": {
    "instance_uuid": "<tssm-nfv-service-instance-uuid>" // uuid of the previous
object created
  }
}
```

An example 200 response:

```
{
  "output": {
    "jobid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
  }
}
```

5.5. PNF

5.5.1. Discover PNF

POST to

```
http://<csp-ms-vm>/topology-service/import-pop
```

with json-formatted information in the body like the following:

```

{
  "input": {
    "job_name_prefix": "import_pop",
    "pop": [
      {
        "dc_name": "dc2",
        "name": "pop-vcpe",
        "address": {
          "street": "1133 Innovation Way",
          "city": "Mountain View",
          "state": "CA",
          "zip_code": "94089",
          "country": "USA"
        },
        "device": [
          {
            "name": "juniper-pnf-device-space",
            "device_ip": "xx.xxx.xx.xxx",
            "pnf_package": "juniper-mx",
            "assigned_device_profile": "SDN-GW-MX",
            "authentication": {
              "username": "root",
              "password": "Embe1mpls"
            }
          }
        ]
      }
    ]
  }
}

```

5.5.2. Configure PNF

POST to

```
http://<csp-ms-vm>/tssm/pnf-configure
```

with json-formatted information in the body like the following:


```
{
  "input": {
    "device": [{
      "pnf_device_uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "config_template": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
      "config_variables": {
        "BGP_L3VPN_ADDR": "1.1.1.1",
        "CONTRAIL_CONTROLLER_ADDR": "2.2.2.2",
        "CONTRAIL_COMPUTE_PREFIX": "xx.xxx.xx.xxx/xx"
      }
    }]
  }
}
```

5.6. Deletion

5.6.1. Delete a POP



This removes only the pop, vim, resource-pool and associated pnf-device,

POST to

```
http://<csp-ms-vm>/topology-service/remove-pop
```

with json-formated information in the body like the following:

```
{
  "input": {
    "job_name_prefix": "delete-pop",
    "pop": [
      {
        "name": "pop-vcpe"
      }
    ]
  }
}
```

5.6.2. Delete a Site

You can delete a site only or delete a site along with its tenant.



If the nf-v-service-instance is associated with the customer, it cannot be deleted. Otherwise, use vl-terminate to terminate the vlins, delete the sites and delete the tenant.

POST to

```
http://<csp-ms-vm>/tssm/remove-site
```

with json-formatted information in the body like the following:

```
{ "input":
  {
    "tenant_name" : "vcpe-customer",
    "remove_tenant": False ①
    "sites": [
      {
        "site_name" : " vcpe -site"
      }
    ]
  }
}
```

① If set to true, deletes the tenant as well, else just deletes the site.

Delete Customer and Associated Sites

POST to

```
http://<csp-ms-vm>/tssm/remove-site
```

with json-formatted information in the body like the following:

```
{ "input":
  {
    "tenant_name" : "vcpe-customer",
    "remove_tenant": True ①
  }
}
```

① If set to true, deletes the tenant as well, else just deletes the site.

Delete Customer's Sites While Retaining Customer]

POST to

```
http://<csp-ms-vm>/tssm/remove-site
```



```

wan-config\";\n    \n    revision 2015-11-11 {\n        description \"Initial
revision\";\n    }\n    \n    leaf mgmt_ip {\n        description \"Assigned
management ip\";\n        type string;\n    }\n}\n\n",
    "name": "SilverPeak WAN config"
}
},
"nsd-package": {
    "nsd-instantiation-template": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "uuid": "848050da-d9e4-4caa-88e0-33dcfffb9337",
    "nsd-start-template": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "vnf-config": [
        {
            "vnfd-uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
            "vnfd-id": "SilverPeak-VX_WAN-Optimization",
            "selected-function-chain": {
                "advanced-config": {
                    "default-advanced-config-variables": "",
                    "config-template": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
                },
                "function-chain-name": "WAN-Optimization"
            },
            "default-base-config-variables": ""
        }
    ],
    "nsd": {
        "description": "",
        "vnfd": [
            {
                "vnfd-ref": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
                "id": "SilverPeak-VX_WAN-Optimization"
            }
        ],
        "vld": [
            {
                "vld-ref": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
                "id": "left_11"
            },
            {
                "vld-ref": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
                "id": "right_13"
            },
            {
                "vld-ref": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
                "id": "mgmt"
            }
        ],
        "monitoring-parameter": [

```

```

{
  "param-id": "num-sessions",
  "description": "Total sessions for the Network Service"
}
],
"service-deployment-flavour": [
  {
    "constituent-vnf": [
      {
        "vnf-flavour-id-reference": "Gold",
        "number-of-instances": 1,
        "vnf-reference": "SilverPeak-VX_WAN-Optimization"
      }
    ],
    "id": "Gold",
    "description": "Gold Service"
  }
],
"forwarding-graph": [
  {
    "constituent-vnfs": [
      "SilverPeak-VX_WAN-Optimization"
    ],
    "dependent-virtual-link": [
      {
        "id": "left_11"
      },
      {
        "id": "right_13"
      }
    ],
    "connection-point": [
      {
        "ns-cp-id": "ns-entry",
        "vl": "left_11",
        "id": "0"
      },
      {
        "vnfd-cp": {
          "cp-id": "left-interface",
          "vnfd-id": "SilverPeak-VX_WAN-Optimization"
        },
        "vl": "left_11",
        "id": "1"
      },
      {
        "vnfd-cp": {

```

```

        "cp-id": "right-interface",
        "vnfd-id": "SilverPeak-VX_WAN-Optimization"
    },
    "vl": "right_13",
    "id": "2"
},
{
    "ns-cp-id": "ns-exit",
    "vl": "right_13",
    "id": "3"
}
],
"number-of-end-points": 4,
"number-of-virtual-links": 2,
"id": "site-access",
"network-forwarding-path": [
    {
        "policy": {
            "min-port": "-1",
            "max-port": "-1",
            "proto": "any"
        },
        "connection": [
            "0",
            "1",
            "2",
            "3"
        ],
        "id": "1"
    }
]
},
{
    "constituent-vnfs": [
        "SilverPeak-VX_WAN-Optimization"
    ],
    "dependent-virtual-link": [
        {
            "id": "mgmt"
        }
    ],
    "connection-point": [
        {
            "ns-cp-id": "ns-mgmt",
            "vl": "mgmt",
            "id": "0"
        }
    ],

```

```

    {
      "vnfd-cp": {
        "cp-id": "mgmt",
        "vnfd-id": "SilverPeak-VX_WAN-Optimization"
      },
      "vl": "mgmt",
      "id": "1"
    }
  ],
  "number-of-end-points": 2,
  "number-of-virtual-links": 1,
  "id": "site-access-mgmt",
  "network-forwarding-path": [
    {
      "connection": [
        "0",
        "1"
      ],
      "id": "1"
    }
  ]
},
"provider": "Juniper",
"connection-point": [
  {
    "id": "ns-mgmt"
  },
  {
    "type": "L3-VPN",
    "id": "ns-entry"
  },
  {
    "id": "ns-exit"
  }
],
"name": "wan"
},
"ownership": {
  "shared": false,
  "domain-id": "default",
  "tenant-id": "$ABCDEF123456"
},
"vndf-packages": {
  "c90b5996-86db-11e6-ac0a-005056b1878f": {
    "vnfd": {

```

```

"vnf-connection-points": [
  {
    "virtual-link-reference": "management-network",
    "id": "mgmt-interface",
    "description": "Management interface"
  },
  {
    "virtual-link-reference": "left-data-network",
    "id": "left-interface",
    "description": "Left interface"
  },
  {
    "virtual-link-reference": "right-data-network",
    "id": "right-interface",
    "description": "Right interface"
  }
],
"monitoring-params": [
  {
    "param-id": "flows",
    "description": "Number of flows"
  }
],
"deployment-flavors": [
  {
    "constituent-vdus": [
      {
        "id": "VX-VDU",
        "constituent-vnfc": [
          "C1"
        ]
      }
    ],
    "flavor-id": "Gold",
    "flavor-key": [
      {
        "param-id": "flows",
        "value": 50000
      }
    ]
  }
],
"virtual-links": [
  {
    "connectivity-type": "ELAN",
    "id": "management-network",
    "description": "mgmt-network-link"
  }
]

```



```

    },
    {
      "connectivity-type": "ELAN",
      "id": "left-data-network",
      "description": "left-network-link"
    },
    {
      "connectivity-type": "ELAN",
      "id": "right-data-network",
      "description": "right-network-link"
    }
  ],
  "name": "WAN-Optimization",
  "family": "silverpeak",
  "version": "1.0",
  "auto-scale-policy": {
    "policies": [
      {
        "threshold": {
          "max": 1000,
          "min": 500
        },
        "action": "Auto-Scale",
        "param-id": "flows"
      }
    ]
  },
  "provider": "SilverPeak",
  "vdu": [
    {
      "vdu-id": "VX-VDU",
      "image-name": "silverpeak-vx-img", // used as package name
      "vnfc": [
        {
          "id": "C1",
          "connection-points": [
            {
              "virtual-link-reference": "management-network",
              "id": "mgmt-nic"
            },
            {
              "virtual-link-reference": "left-data-network",
              "id": "left-data-nic"
            },
            {
              "virtual-link-reference": "right-data-network",
              "id": "right-data-nic"
            }
          ]
        }
      ]
    }
  ]
}

```

```

        }
      ]
    }
  ],
  "cpu": {
    "num-vcpu": 2
  },
  "memory": {
    "total-memory-mb": 4096
  }
}
],
"description": "SilverPeak VX WAN Optimization"
},
...,
"name": "SilverPeak-VX",
"ownership": {
  "shared": false,
  "domain-id": "default",
  "tenant-id": "$ABCDEF123456"
},
"uuid": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX"
}
},
"vlinkds": {
  "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX": {
    "subnets": [
      {
        "subnet": "@right-subnet-cidr"
      }
    ],
    "description": "Contrail Virtual Network",
    "ownership": {
      "shared": false,
      "domain-id": "default",
      "tenant-id": "$ABCDEF123456"
    },
    "network-properties": {
      "shared": true,
      "allow-transit": false,
      "external": false
    },
    "connectivity-type": "ELAN",
    "vim-resource-mapping": "@right-net-id",
    "vld-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "provider": "Juniper",
    "route-targets": [

```

```

        {
            "route-target": "@right-net-rt"
        }
    ],
    "name": "right"
},
"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX": {
    "subnets": [
        {
            "subnet": "@left-subnet-cidr"
        }
    ],
    "description": "Contrail Virtual Network",
    "ownership": {
        "shared": false,
        "domain-id": "default",
        "tenant-id": "$ABCDEF123456"
    },
    "network-properties": {
        "shared": false,
        "allow-transit": false,
        "external": false
    },
    "connectivity-type": "ELAN",
    "vim-resource-mapping": "@left-net-id",
    "vld-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",
    "provider": "Juniper",
    "route-targets": [
        {
            "route-target": "@left-net-rt"
        }
    ],
    "name": "left"
},
"XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX": {
    "subnets": [
        {
            "subnet": "@mgmt-subnet-cidr"
        }
    ],
    "description": "Contrail Virtual Network",
    "ownership": {
        "shared": false,
        "domain-id": "default",
        "tenant-id": "$ABCDEF123456"
    },
    "network-properties": {

```

```
    "shared": true,  
    "allow-transit": false,  
    "external": true  
  },  
  "connectivity-type": "ELAN",  
  "vim-resource-mapping": "@mgmt-net-id",  
  "vld-id": "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX",  
  "provider": "Juniper",  
  "route-targets": [  
    {  
      "route-target": "@mgmt-net-rt"  
    }  
  ],  
  "name": "mgmt"  
}  
}  
}
```

Chapter 6. CSO FAQ

Frequently asked questions about CSO APIs



The IP address <csp-ms-vm> is a placeholder for the CSO install location.

6.1. How do I change the default password of VNF ?

1. Go directly to NSO service and perform the following tasks:
2. Get the VNFD package UUID

```
GET http://<csp-ms-vm>/restconf/data/maestro/catalog/vnfd-package
```

1. Copy the body

```
GET http://<csp-ms-vm>/restconf/data/maestro/catalog/vnfd-package/uuid
```

1. Update the password using PUT

```
PUT http://<csp-ms-vm>/restconf/data/maestro/catalog/vnfd-package/uuid
```



Password update fails if there are active instances referenced to the VNFD package.

6.2. How do centralized servers work?

A centralized CSO server can only communicate with physical devices and/or VNF through its associated regional servers, while each physical device can be used and controlled by its regional server. It is the regional servers that create and use VNF (virtual network functions).

Physical devices should be located within geographic regions in proximity to the bulk of the networking traffic that they handle. When controlling physical resources (devices) managed by CSO, it is the centralized server that requests control through a regional server.

6.3. How do I create plugins for configuring third party PE Devices?

CSO architecture allows you to create a plugin which can be used to configure a third party PE device.

The following diagram illustrates how PNF plugins work:

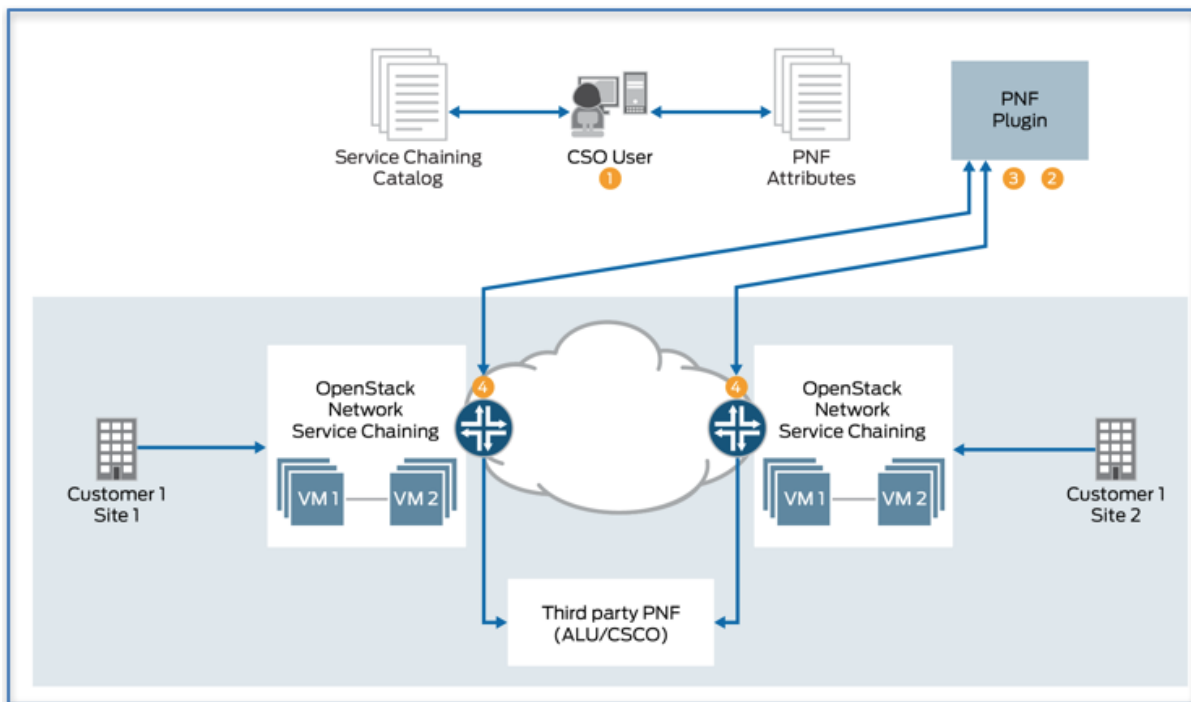


Figure 13. PNF plugin

1. User creates a service from the catalog with attributes for the third party PNF.
2. PNF plugin is subscribed to RabbitMQ notifications to receive service activation notification.
3. After receiving notification, the user queries for attributes that were pushed during creation.
4. PNF plugin uses the attributes to generate push configuration for the PNF.

Currently PNF plugins should be created with the assistance of Juniper Professional Services.

6.4. How do I onboard third party VNFs?

Please contact your Juniper representative for information on onboarding third party VNFs. Tools to simplify the process are under development.

Chapter 7. Security Management RESTful API Reference

These Security Management APIs allow you to manage security-related services and security scheduling as follows:

- **Security-Management/Services APIs.** Allow you to create, modify, and/or delete security-related services (aka applications running on devices) in both your test and deployment environments. An excellent example of the kind of service to which we refer is the Domain Name Service (DNS). Such services are based on protocols and ports used by applications, and when added to a policy, a configured service or group of services can be applied across all devices associated with the policy.



Services are candidates for firewall policy end-points. The protocols used to create a service include: TCP, UDP, MS-RPC, SUN-RPC, ICMP, and ICMPv6.



In addition to the services listed in this section, CSO also includes predefined, commonly used services that you cannot modify or delete.

- **Security-Management/Schedulers APIs.** Are used to create, modify, and delete Schedulers in both your test and deployment environments. The schedules associated with these schedulers allow you to specify the duration of policies. To enable a policy for a specified time, you must either create a schedule for that policy or link the policy to an existing schedule. When a schedule times out, the associated policy is deactivated and all sessions associated with the policy also expire.

7.1. Security Management/Service APIs

The following operations can be performed using Service Management RESTful APIs.

7.1.1. Get All Services

Gets all services.

```
URI /api/juniper/sd/service-management/v5/services
```

HTTP method GET

Content-Type None

Accept-Type application/json

Access-Control manageApplications

Example JSON Output:

```
{
  "services": {
    "service": [
      {
        "uuid": "65724",
        "hash-key": "D6AD5F894A87AEC04B38B0AD9F02FA586629C211",
        "name": "ABC",
        "display_name": "ABC",
        "description": "",
        "domain-id": 1123,
        "is-group": false,
        "definition_type": "CUSTOM"
      }
    ],
    "uri": "/api/juniper/sd/service-management/v5/services",
    "total": 1
  }
}
```

7.1.2. Get Service details

This request is used to get details related to the services.

URI `/api/juniper/sd/service-management/v5/services/details`

HTTP method GET

Content-Type None

Accept-Type application/json

Access-Control manageApplications

Example JSON Output:

```
{?output?:{?value?[{ "service":{ "id_perms":{ "created": "2017-08-16T04:52:56.000775"
, "creator": "cspadmin", "last_modified": "2017-08-16T04:52:56.000775", "last-modified-
by-user-name": "cspadmin", "created-time": 1502859176775, "last-modified-time"
: 1502859176775}, "uuid": "65724", "display_name": "ABC", "protocols":{ "protocol": [{ "sun
rpc-protocol-type": "TCP", "msrpc-protocol-type": "TCP", "protocol-number": 6, "name"
: "abc", "src-port": "", "dst-port": "", "disable-timeout": false, "protocol-type"
: "PROTOCOL_TCP", "rpc-program-number": "0", "icmp-code": 0, "icmp-type": 0,
"description": ""}]}, "edit-version": 1, "update_number": 0, "definition_type": "CUSTOM"
, "domain-id": 1123, "name": "ABC", "is-group": false, "description": "", "uri"
: "/api/juniper/sd/service-management/v5/services/65724"}]}, uri:
"/api/juniper/sd/service-management/v5/services/65724,?totalSize?:1}}
```


7.1.3. Get Service by UUID

This request is used to get services by UUID.

```
URI /api/juniper/sd/service-management/v5/services/{id}
```

HTTP method GET

Content-Type None

Accept-Type application/json

Access-Control manageApplications

Example JSON Output:

```

{
  "service": {
    "id_perms": {
      "created": "2017-08-16T04:52:56.000775",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T04:52:56.000775",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502859176775,
      "last-modified-time": 1502859176775
    },
    "uuid": "65724",
    "display_name": "ABC",
    "protocols": {
      "protocol": [
        {
          "sunrpc-protocol-type": "TCP",
          "msrpc-protocol-type": "TCP",
          "protocol-number": 6,
          "name": "abc",
          "src-port": "",
          "dst-port": "",
          "disable-timeout": false,
          "protocol-type": "PROTOCOL_TCP",
          "rpc-program-number": "0",
          "icmp-code": 0,
          "icmp-type": 0,
          "description": ""
        }
      ]
    },
    "edit-version": 1,
    "update_number": 0,
    "definition_type": "CUSTOM",
    "domain-id": 1123,
    "name": "ABC",
    "is-group": false,
    "description": "",
    "uri": "/api/juniper/sd/service-management/v5/services/65724"
  }
}

```

7.1.4. Modify Service

This request is used to modify an existing Service. This operation is a full replace and therefore, you must provide all the basic information.

URI `/api/juniper/sd/service-management/v5/services/{id}`

HTTP method PUT

Content-Type application/json

Accept-Type application/json

Access-Control ModifyApplication

Example JSON Input

```
{
  "service": {
    "uuid": "65724",
    "id_perms": {
      "created": "2017-08-16T04:52:56.000775",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T04:52:56.000775",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502859176775,
      "last-modified-time": 1502859176775
    },
    "display_name": "ABC",
    "protocols": {
      "protocol": [
        {
          "sunrpc-protocol-type": "TCP",
          "msrpc-protocol-type": "TCP",
          "protocol-number": 6,
          "name": "abc",
          "src-port": "",
          "dst-port": "",
          "disable-timeout": false,
          "protocol-type": "PROTOCOL_TCP",
          "rpc-program-number": "0",
          "icmp-code": 0,
          "icmp-type": 0,
          "description": ""
        },
        {
          "name": "xyz",
          "description": "",
          "protocol-type": "PROTOCOL_TCP",
          "dst-port": "",
          "enable-timeout": true,
          "inactivity-timeout": "",
          "inactivity-time-type": "Seconds",
          "alg": null,

```

```

        "src-port": "",
        "disable-timeout": false,
        "protocol-number": 6
    }
]
},
"edit-version": 1,
"update_number": 0,
"definition_type": "CUSTOM",
"domain-id": 1123,
"name": "ABC",
"is-group": false,
"description": "",
"uri": "/api/juniper/sd/service-management/v5/services/65724",
"application-services": ""
}
}

```

Example JSON Output:

```

{
  "service": {
    "id_perms": {
      "created": "2017-08-16T04:52:56.000775",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T05:01:40.000704",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502859176775,
      "last-modified-time": 1502859700704
    },
    "uuid": "65724",
    "display_name": "ABC",
    "protocols": {
      "protocol": [
        {
          "sunrpc-protocol-type": "TCP",
          "msrpc-protocol-type": "TCP",
          "protocol-number": 6,
          "name": "abc",
          "src-port": "",
          "dst-port": "",
          "disable-timeout": false,
          "protocol-type": "PROTOCOL_TCP",
          "rpc-program-number": "0",
          "icmp-code": 0,
          "icmp-type": 0,
          "description": ""
        }
      ]
    }
  }
}

```

```

    },
    {
      "sunrpc-protocol-type": "TCP",
      "msrpc-protocol-type": "TCP",
      "protocol-number": 6,
      "name": "xyz",
      "src-port": "",
      "dst-port": "",
      "disable-timeout": false,
      "protocol-type": "PROTOCOL_TCP",
      "rpc-program-number": "0",
      "icmp-code": 0,
      "icmp-type": 0,
      "description": ""
    }
  ]
},
"edit-version": 2,
"update_number": 1,
"definition_type": "CUSTOM",
"domain-id": 1123,
"name": "ABC",
"is-group": false,
"description": "",
"uri": "/api/juniper/sd/service-management/v5/services/65724"
}
}

```

7.1.5. Create a New Service

Creates a new service.

URI `/api/juniper/sd/service-management/v5/services`

HTTP method POST

Content-Type application/json

Accept-Type application/json

Access-Control createApplications

Example JSON Input

```

{
  "service": {
    "is-group": false,
    "name": "Servcie1",
    "description": "",
    "application-services": "",
    "protocols": {
      "protocol": [
        {
          "name": "PROTOCOL1",
          "description": "",
          "protocol-type": "PROTOCOL_TCP",
          "dst-port": "",
          "enable-timeout": true,
          "inactivity-timeout": "",
          "inactivity-time-type": "Seconds",
          "alg": null,
          "src-port": "",
          "disable-timeout": false,
          "protocol-number": 6
        }
      ]
    }
  }
}

```

Sample Output JSON:

```

{
  "service": {
    "id_perms": {
      "created": "2017-08-16T05:05:14.000419",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T05:05:14.000419",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502859914419,
      "last-modified-time": 1502859914419
    },
    "uuid": "294912",
    "display_name": "Servcie1",
    "protocols": {
      "protocol": [
        {
          "sunrpc-protocol-type": "TCP",
          "msrpc-protocol-type": "TCP",
          "protocol-number": 6,
          "name": "PROTOCOL1",
          "src-port": "",
          "dst-port": "",
          "disable-timeout": false,
          "protocol-type": "PROTOCOL_TCP",
          "rpc-program-number": "0",
          "icmp-code": 0,
          "icmp-type": 0,
          "description": ""
        }
      ]
    },
    "edit-version": 1,
    "update_number": 0,
    "definition_type": "CUSTOM",
    "domain-id": 1123,
    "name": "Servcie1",
    "is-group": false,
    "description": ""
  }
}

```

7.1.6. Delete Services

Use to delete services by ID.

URI /api/juniper/sd/service-management/v5/services/{id}

HTTP method DELETE
 Content-Type None
 Accept-Type None
 Access-Control DeleteApplication

7.2. Security Management/Scheduler APIs

The following operations can be performed using Scheduler Management APIs.

7.2.1. Get expired scheduler

This request is used to get all expired schedulers.

URI `/api/juniper/sd/scheduler-management/v5/get-expired-schedulers?offsetTime=long`

HTTP method GET
 Content-Type None
 Accept-Type application/json
 Access-Control sdManageScheduler

Example JSON Output:

```
{
  "output": {
    "value": [
      {
        "last-modified-time": 1502858047373,
        "created-by-user-name": "cspadmin",
        "version": 0,
        "uuid": "229376",
        "description": "",
        "domain-id": 1123,
        "schedules": {
          "schedule": [
            {
              "all-day": true,
              "exclude": false,
              "day": "DAILY"
            }
          ]
        },
        "name": "S1",
        "display_name": "S1",
        "stop-date1": "2017-08-21.00:00",
        "stop-date2": "2017-08-18.00:00",
        "definition_type": "CUSTOM",
        "edit-version": 1,
        "created-time": 1502858047373,
        "last-modified-by-user-name": "cspadmin",
        "start-date2": "2017-08-17.00:00",
        "start-date1": "2017-08-20.00:00"
      }
    ],
    "uri": "/api/juniper/sd/scheduler-management/v5/get-expired-schedulers?offsetTime=long",
    "totalSize": 1
  }
}
```

7.2.2. Get All Schedulers

This method is used to get all schedulers.

URI `/api/juniper/sd/scheduler-management/v5/schedulers`

HTTP method GET
 Content-Type None
 Accept-Type application/json
 Access-Control sdManageScheduler

Example JSON Output:


```
{
  "schedulers": {
    "scheduler": [
      {
        "last-modified-time": 1502858047373,
        "created-by-user-name": "cspadmin",
        "version": 0,
        "uuid": "229376",
        "description": "",
        "domain-id": 1123,
        "schedules": {
          "schedule": [
            {
              "all-day": true,
              "exclude": false,
              "day": "DAILY"
            }
          ]
        },
        "name": "S1",
        "display_name": "S1",
        "stop-date1": "2017-08-21.00:00",
        "stop-date2": "2017-08-18.00:00",
        "definition_type": "CUSTOM",
        "edit-version": 1,
        "created-time": 1502858047373,
        "last-modified-by-user-name": "cspadmin",
        "start-date2": "2017-08-17.00:00",
        "start-date1": "2017-08-20.00:00"
      }
    ],
    "uri": "/api/juniper/sd/scheduler-management/v5/schedulers",
    "total": 1
  }
}
```

7.2.3. Get Scheduler by UUID

This request is used to get scheduler by UUID.

URI `/api/juniper/sd/scheduler-management/v5/schedulers/{id}`

HTTP method GET

Content-Type None

Accept-Type application/json

Access-Control sdManageScheduler

Example JSON Output:

```
{
  "scheduler": {
    "id_perms": {
      "created": "2017-08-16T04:34:07.000373",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T04:34:07.000373",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502858047373,
      "last-modified-time": 1502858047373
    },
    "display_name": "S1",
    "name": "S1",
    "update_number": 0,
    "description": "",
    "start-date1": "2017-08-20.00:00",
    "stop-date1": "2017-08-21.00:00",
    "start-date2": "2017-08-17.00:00",
    "stop-date2": "2017-08-18.00:00",
    "schedules": {
      "schedule": [
        {
          "day": "DAILY",
          "exclude": false,
          "all-day": true
        }
      ]
    },
    "uri": "/api/juniper/sd/scheduler-management/v5/schedulers/229376/schedules"
  },
  "edit-version": 1,
  "definition_type": "CUSTOM",
  "domain-id": 1123,
  "uuid": "229376",
  "uri": "/api/juniper/sd/scheduler-management/v5/schedulers/229376"
}
```

7.2.4. Modify Scheduler

This request is used to modify an existing scheduler by replacing it. Because this performs a full replace, you must provide all the basic information.

URI `/api/juniper/sd/scheduler-management/v5/schedulers/{id}`

HTTP method PUT

Content-Type application/json
 Accept-Type application/json
 Access-Control sdModifyScheduler

Example JSON Input

```
{
  "scheduler": {
    "uuid": "229376",
    "id_perms": {
      "created": "2017-08-16T04:34:07.000373",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T04:34:07.000373",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502858047373,
      "last-modified-time": 1502858047373
    },
    "display_name": "S1",
    "name": "S1",
    "update_number": 0,
    "description": "",
    "start-date1": "2017-08-20.00:00",
    "stop-date1": "2017-08-22.00:00",
    "start-date2": "2017-08-17.00:00",
    "stop-date2": "2017-08-18.00:00",
    "schedules": {
      "schedule": [
        {
          "day": "DAILY",
          "exclude": false,
          "all-day": true
        }
      ]
    },
    "edit-version": 1,
    "definition_type": "CUSTOM",
    "domain-id": 1123,
    "uri": "/api/juniper/sd/scheduler-management/v5/schedulers/229376",
    "title": "Edit",
    "start-date1-time": "12:00 AM",
    "stop-date1-time": "12:00 AM",
    "start-date2-time": "12:00 AM",
    "stop-date2-time": "12:00 AM"
  }
}
```

Sample JSON Output:

```
{
  "scheduler": {
    "id_perms": {
      "created": "2017-08-16T04:34:07.000373",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T04:44:15.000096",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502858047373,
      "last-modified-time": 1502858655096
    },
    "display_name": "S1",
    "name": "S1",
    "update_number": 1,
    "description": "",
    "start-date1": "2017-08-20.00:00",
    "stop-date1": "2017-08-22.00:00",
    "start-date2": "2017-08-17.00:00",
    "stop-date2": "2017-08-18.00:00",
    "schedules": {
      "schedule": [
        {
          "day": "DAILY",
          "exclude": false,
          "all-day": true
        }
      ]
    },
    "uri": "/api/juniper/sd/scheduler-management/v5/schedulers/229376/schedules"
  },
  "edit-version": 2,
  "definition_type": "CUSTOM",
  "domain-id": 1123,
  "uuid": "229376",
  "uri": "/api/juniper/sd/scheduler-management/v5/schedulers/229376"
}
```

7.2.5. Create Scheduler

This method is used to create new scheduler.

URI /api/juniper/sd/scheduler-management/v5/schedulers

HTTP method POST

Content-Type application/json

Accept-Type application/json

Access-Control sdCreateScheduler

Example JSON Input

```
{
  "scheduler": {
    "title": "Create",
    "name": "S2",
    "description": "",
    "start-date1": "2017-08-20.00:00",
    "stop-date1": "2017-08-21.00:00",
    "start-date2": "2017-08-24.00:00",
    "stop-date2": "2017-08-25.00:00",
    "schedules": {
      "schedule": [
        {
          "day": "SUNDAY",
          "exclude": false,
          "all-day": false,
          "id": "sunday",
          "title": "Sunday",
          "stop-time1": "17:00",
          "start-time1": "09:00"
        },
        {
          "day": "MONDAY",
          "exclude": false,
          "all-day": false,
          "id": "monday",
          "title": "Monday",
          "stop-time1": "17:00",
          "start-time1": "09:00"
        },
        {
          "day": "TUESDAY",
          "exclude": false,
          "all-day": false,
          "id": "tuesday",
          "title": "Tuesday",
          "stop-time1": "17:00",
          "start-time1": "09:00"
        },
        {
          "day": "WEDNESDAY",
          "exclude": false,
          "all-day": true,
          "id": "wednesday",
          "title": "Wednesday"
        }
      ]
    }
  }
}
```

```

{
  "day": "THURSDAY",
  "exclude": false,
  "all-day": true,
  "id": "thursday",
  "title": "Thursday"
},
{
  "day": "FRIDAY",
  "exclude": false,
  "all-day": true,
  "id": "friday",
  "title": "Friday"
},
{
  "day": "SATURDAY",
  "exclude": false,
  "all-day": true,
  "id": "saturday",
  "title": "Saturday"
}
]
}
}

```

Example JSON Output:

```

{
  "scheduler": {
    "id_perms": {
      "created": "2017-08-16T04:48:01.000255",
      "creator": "cspadmin",
      "last_modified": "2017-08-16T04:48:01.000255",
      "last-modified-by-user-name": "cspadmin",
      "created-time": 1502858881255,
      "last-modified-time": 1502858881255
    },
    "display_name": "S2",
    "name": "S2",
    "update_number": 0,
    "description": "",
    "start-date1": "2017-08-20.00:00",
    "stop-date1": "2017-08-21.00:00",
    "start-date2": "2017-08-24.00:00",
    "stop-date2": "2017-08-25.00:00",
    "schedules": {

```

```

"schedule": [
  {
    "day": "SUNDAY",
    "start-time1": "09:00",
    "stop-time1": "17:00",
    "exclude": false,
    "all-day": false
  },
  {
    "day": "MONDAY",
    "start-time1": "09:00",
    "stop-time1": "17:00",
    "exclude": false,
    "all-day": false
  },
  {
    "day": "TUESDAY",
    "start-time1": "09:00",
    "stop-time1": "17:00",
    "exclude": false,
    "all-day": false
  },
  {
    "day": "WEDNESDAY",
    "exclude": false,
    "all-day": true
  },
  {
    "day": "THURSDAY",
    "exclude": false,
    "all-day": true
  },
  {
    "day": "FRIDAY",
    "exclude": false,
    "all-day": true
  },
  {
    "day": "SATURDAY",
    "exclude": false,
    "all-day": true
  }
],
"uri": "/api/juniper/sd/scheduler-management/v5/schedulers/schedules"
},
"edit-version": 1,
"definition_type": "CUSTOM",

```

```
"domain-id": 1123,  
"uuid": "262145",  
"uri": "/api/juniper/sd/scheduler-management/v5/schedulers"  
}  
}
```

7.2.6. Delete Scheduler

Use to delete a scheduler by ID.

```
URI /api/juniper/sd/scheduler-management/v5/schedulers/{id}
```

HTTP method DELETE

Content-Type None

Accept-Type None

Access-Control sdDeleteScheduler

Chapter 8. Glossary

CPE

Customer Premises Equipment.

CSO

Cloud Services Orchestration.

CSP

Cloud Services Platform

DNS

Domain Name Service.

FQ name

Fully qualified name. An unambiguous name that specifies which object, function, or variable to which a call refers, without regard to the call context.

GUID

Global Unique Identifier, almost synonymous with UUID.

HTTP

HyperText Transfer Protocol.

ISG

Industry Specification Group.

K8

Kubernetes, an open-source application used for deploying, maintaining, and scaling applications and microservices.

KPI

Key Performance Indicators.

MANO

Management and Organization.

MS

Managed Services.

NAT

Network Address Translation. Method of concealing a set of host addresses on a private network behind a pool of public addresses. Using NAT allows conservation of registered IP addresses within private networks, simplifies IP address management through a form of transparent routing, and increases network privacy by hiding internal IP addresses from external networks.

NFV

Network Function Virtualization. Standard IT virtualization technology that consolidates many network equipment types onto standard-architecture high-volume servers, switches, and storage. NFV involves designing, deploying, and managing network functions in software that can be moved to, or instantiated in, various locations in the network as required, without the need to install purpose-built hardware.

NFVI

Network Functions Virtualization Infrastructure.

NFVO

Network Functions Virtualization Orchestrator.

NFX

Network Functions platform series.

NMS

Network Management Service.

NS

Network Services.

NSD

Network Service Descriptor; defines processes that interpret, execute, and manage the configuration of extended interface attributes, policies, zones, address books, firewall screens, NAT, and other network security treatments.

PEP

Policy Enforcement Point; an entity—which can be a component, microservice, application, or other object—that serves as a gateway or "front door" to a digital resource.

PDP

Policy Decision Point; and entity—which can be a component, microservice, application, or other object—that evaluates requests for access to digital resources and makes a decision, based on attributes, as to whether the request should be granted.

PNF

Physical Network Service.

POP

Point Of Presence, an artificial demarcation point OR interface point between communicating entities.

REST

Representational State Transfer; a set of conventions for offering and using resources over the Internet, as described in [Feilding's dissertation](#) in the year 2000.

SCP

Secure Control Protocol (uses ssh, and the conventional port is 22).

Scheduler

For security management, a policy scheduler that enables settings to limit access to resources made available through applications.

SDN

Software Defined Networking.

Service Orchestration

Automated arrangement, coordination, and management of computer systems, middleware, and services.

SFC

Service Function Chain.

Shard

A horizontal section of a database that results from partitioning a very large database the into smaller, faster, more easily managed parts.

SSH

Secure Shell, a cryptographic network protocol for operating network services securely over an unsecured network.

TSSM

Tenant, Site and Services Manager.

uCPE

Universal Customer Premises Environment. Used to identify a Distributed CPE deployment.

UUID

Uniform Unique Identifier as described in <https://tools.ietf.org/html/rfc4122.html>. UUIDs have two special cases, the nil UUID, which is 00000000-0000-0000-000000000000 and version 1 UUIDs, for which the third group starts with a 1.

vCPE

Virtual Customer Premises Environment. Used to identify a Centralized CPE deployment.

VIM

Virtual Infrastructure Manager.

VM

Virtual Machine.

VNF

Virtual Network Function.

VNFD

Virtual Network Function Descriptor.

Chapter 9. API Reference

Use the Cloud Services Orchestration (CSO) APIs to orchestrate processes for developing portals, applications and automations. You can use these APIs to automate various tasks, processes and workflows as you design, deploy and monitor the services that you provide for your customers.

Two categories of CSO APIs exist:

- **Pre-staging APIs.** For use by Cloud administrators and providers to pre-stage their customer implementation and sites. These APIs are used by network service providers to create service offerings.
- **Lifecycle management APIs.** For use by customers, offered to them through their Cloud Services provider portal, to manage the lifecycle of the Network Service that they are purchasing.

Because some complex operations don't easily lend themselves to strict RESTful (CRUD) conventions, the CSO HTTP APIs are available through endpoints to which you can send HTTP requests that map all complex operations to:

- REST CRUD.
- or--
- RPC over HTTP.

When creating your requests:

- For each operation that maps to CRUD, the parent parameter is usually a meaningful name.
- For each operation that maps to RPC, the request is always a POST, and the json object that you construct for the request body must have "input" as root.
- Each response that corresponds to a request that maps to RPC begins with the parent parameter "output".

The requests for creating and importing POPs, onboarding tenants, and creating service instances require that you assemble data into properly-formatted json files for the body (payload) of each request.

9.1. Activation Service (Central)

9.1.1. Overview

Use these Central Activation Service APIs to control details associated with service activation in a centralized deployment.

Version information

Version : 3.0

URI scheme

BasePath : /activation-service-central

Schemes : HTTP

Tags

- **reset-device** : RPC to reset device before re-activation. Without a reset, all bootstrapping requests from device will return a 403 error.

- `authenticate-device` : RPC to authenticate device for a short period of time. During this period, device can be bootstrapped without entering activation code.
- `activation-info` : List of activation related information.

Produces

- `application/json`

9.1.2. Resources

Activation-info

List of activation related information.

Add a new activation-info

```
POST /activation-service-central/activation-info
```

Parameters

Type	Name	Description	Schema	Default
Body	<code>input</code> <i>optional</i>		<code>activation-info{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>activation-info{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/activation-service-central/activation-info"
```

Request body

```

{
  "device_uuid" : { },
  "unique_id" : "string",
  "activation_code" : "string",
  "authentication_expiry_time" : { },
  "bootstrap_state" : { },
  "configuration_handling" : { },
  "pre_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "post_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "notifications" : {
    "notification" : [ {
      "received" : "string",
      "source_address" : "string",
      "notification_type" : "string",
      "message" : "string",
      "ssh_host_keys" : {
        "ssh_host_key" : {
          "format" : "string",
          "key_data" : "string"
        }
      },
    },
    "web_hook_results" : {
      "web_hook_result" : {
        "name" : "string",
        "response_body" : "string"
      }
    }
  } ],
  "web_hooks" : {
    "mode" : "string",
    "web_hook" : [ {
      "name" : "string",
      "accept" : "string",
      "url" : "string",
      "basic_auth" : {
        "username" : "string",
        "password" : "string"
      }
    } ]
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,

```

```

    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "device_uuid" : { },
  "unique_id" : "string",
  "activation_code" : "string",
  "authentication_expiry_time" : { },
  "bootstrap_state" : { },
  "configuration_handling" : { },
  "pre_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "post_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "notifications" : {
    "notification" : [ {
      "received" : "string",
      "source_address" : "string",
      "notification_type" : "string",
      "message" : "string",
      "ssh_host_keys" : {
        "ssh_host_key" : {

```

```

        "format" : "string",
        "key_data" : "string"
    }
},
"web_hook_results" : {
    "web_hook_result" : {
        "name" : "string",
        "response_body" : "string"
    }
}
} ]
},
"web_hooks" : {
    "mode" : "string",
    "web_hook" : [ {
        "name" : "string",
        "accept" : "string",
        "url" : "string",
        "basic_auth" : {
            "username" : "string",
            "password" : "string"
        }
    } ]
},
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {

```



```
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string"
}
```

Get the activation-info list

```
GET /activation-service-central/activation-info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< activation-info > array

Example HTTP request

Request path

```
"/activation-service-central/activation-info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single activation-info

```
GET /activation-service-central/activation-info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	activation-info{id}

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/activation-service-central/activation-info/0"
```

Example HTTP response

Response 200

```
{
  "device_uuid" : { },
  "unique_id" : "string",
  "activation_code" : "string",
  "authentication_expiry_time" : { },
  "bootstrap_state" : { },
  "configuration_handling" : { },
  "pre_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "post_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "notifications" : {
    "notification" : [ {
      "received" : "string",
      "source_address" : "string",
      "notification_type" : "string",
      "message" : "string",
      "ssh_host_keys" : {
        "ssh_host_key" : {
          "format" : "string",
          "key_data" : "string"
        }
      }
    }
  ],
  "web_hook_results" : {
    "web_hook_result" : {
      "name" : "string",
      "response_body" : "string"
    }
  }
}
```

```

    }
  }
} ]
},
"web_hooks" : {
  "mode" : "string",
  "web_hook" : [ {
    "name" : "string",
    "accept" : "string",
    "url" : "string",
    "basic_auth" : {
      "username" : "string",
      "password" : "string"
    }
  } ]
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Update activation-info information

```
PUT /activation-service-central/activation-info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	activation-info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/activation-service-central/activation-info/0"
```

Example HTTP response

Response 200

```
{
  "device_uuid" : { },
  "unique_id" : "string",
  "activation_code" : "string",
  "authentication_expiry_time" : { },
  "bootstrap_state" : { },
  "configuration_handling" : { },
  "pre_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "post_configuration_script" : "<<_csp-activation-service-central_scripttype>>",
  "notifications" : {
    "notification" : [ {
```

```

    "received" : "string",
    "source_address" : "string",
    "notification_type" : "string",
    "message" : "string",
    "ssh_host_keys" : {
        "ssh_host_key" : {
            "format" : "string",
            "key_data" : "string"
        }
    },
    "web_hook_results" : {
        "web_hook_result" : {
            "name" : "string",
            "response_body" : "string"
        }
    }
} ]
},
"web_hooks" : {
    "mode" : "string",
    "web_hook" : [ {
        "name" : "string",
        "accept" : "string",
        "url" : "string",
        "basic_auth" : {
            "username" : "string",
            "password" : "string"
        }
    }
]
},
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
}

```

```

},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Delete a single activation-info

```
DELETE /activation-service-central/activation-info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/activation-service-central/activation-info/0"
```

Authenticate-device

RPC to authenticate device for a short period of time. During this period, device can be bootstrapped without

entering activation code.

Execute `authenticate-device` RPC

```
POST /activation-service-central/authenticate-device
```

Parameters

Type	Name	Description	Schema	Default
Body	<code>input</code> <i>optional</i>		authenticate-device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	authenticate-device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/activation-service-central/authenticate-device"
```

Request body

```
{
  "input" : {
    "unique_id" : "string",
    "activation_code" : "string",
    "expiry_duration" : 0,
    "uuid" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "activation_info_id" : "string",
    "fq_name" : "string"
  }
}
```

Reset-device

RPC to reset device before re-activation. Without a reset, all bootstrapping requests from device will return a 403 error.

Execute reset-device RPC

```
POST /activation-service-central/reset-device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		reset-device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	reset-device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/activation-service-central/reset-device"
```


Request body

```
{
  "input" : {
    "unique_id" : "string",
    "uuid" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "activation_info_id" : "string",
    "fq_name" : "string"
  }
}
```

9.1.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

ActivationInfoBootstrapStateType

State of the bootstrap procedure.

Type : enum (NEVER CONNECTED, BOOTSTRAP INCOMPLETE, BOOTSTRAP COMPLETE)

ActivationInfoConfigurationHandlingType

This enumeration indicates how the server should process the provided configuration. When not specified, the device MAY determine how to process the configuration using other means (e.g., vendor-specific metadata).

Type : enum (merge, replace)

ActivationInfoNotificationsType

Name	Description	Schema
notification <i>optional</i>	Example : ["NotificationsNotificationType"]	< NotificationsNotificationType > array

ActivationInfoWebHooksType

Name	Description	Schema
mode <i>optional</i>	Mode to request web-hooks. Default : "ignore-error" Example : "string"	enum (stop-on-first-error, stop-on-first-success, ignore-error)
web_hook <i>optional</i>	Example : ["WebHooksWebHookType"]	< WebHooksWebHookType > array

AuthenticateDevice_InputType

Name	Description	Schema
activation_code <i>required</i>	Activation code for this device. If an activation code is correct, the activation code is temporarily removed as being required. Example : "string"	string
expiry_duration <i>optional</i>	Small window of time the activation code is disabled for this device. The default is 120 seconds Default : 120 Example : 0	integer(int64)
unique_id <i>required</i>	Device's unique identifier, which is usually the serial number. Example : "string"	string
uuid <i>optional</i>	UUID of activation info. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

AuthenticateDevice_OutputType

Name	Description	Schema
activation_info_id <i>optional</i>	UUID for activation info. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
fq_name <i>optional</i>	Fully qualified name for activation_info. Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

NotificationSshHostKeysType

Name	Description	Schema
ssh_host_key <i>optional</i>	Example : "SshHostKeysSshHostKeyType"	SshHostKeysSshHostKeyType

NotificationWebHookResultsType

Name	Description	Schema
web_hook_result <i>optional</i>	Example : "WebHookResultsWebHookResultType"	WebHookResultsWebHookResultType

NotificationsNotificationType

Name	Description	Schema
message <i>optional</i>	A human-readable value. Example : "string"	string

Name	Description	Schema
notification_type <i>optional</i>	The notification, as sent by the device. These values are defined in the southbound API's YANG file. Example : <code>"string"</code>	enum (configuration-applied, configuration-failed, image-download-successful, image-download-failed, image-not-found, image-installed, image-installation-failed, pre-script-warning, pre-script-error, post-script-warning, post-script-error, informational, bootstrap-complete, bootstrap-failed, bootstrap-initiated)
received <i>optional</i>	Time when the bootstrap-server received the notification from the device. Example : <code>"string"</code>	string
source_addresses <i>optional</i>	Source address of the HTTPS connection that sent this notification. When device is behind a NAT, the value is expected to be the NAT-ed address, not the device's actual address. Example : <code>"string"</code>	string
ssh_host_keys <i>optional</i>	Example : <code>"NotificationSshHostKeysType"</code>	NotificationSshHostKeysType
web_hook_results <i>optional</i>	Example : <code>"NotificationWebHookResultsType"</code>	NotificationWebHookResultsType

PermType

Name	Description	Schema
group <i>optional</i>	Example : <code>"string"</code>	string
group_access <i>optional</i>	Example : <code>0</code>	integer(int32)
other_access <i>optional</i>	Example : <code>0</code>	integer(int32)
owner <i>optional</i>	Example : <code>"string"</code>	string
owner_access <i>optional</i>	Example : <code>0</code>	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : <code>0</code>	integer(int32)
owner <i>optional</i>	Example : <code>"string"</code>	string
owner-access <i>optional</i>	Example : <code>0</code>	integer(int32)

Name	Description	Schema
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string
rule_object <i>optional</i>	Example : "string"	string
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

ResetDevice_InputType

Name	Description	Schema
unique_id <i>required</i>	Device's unique identifier, usually the serial-number. Example : "string"	string
uuid <i>optional</i>	Activation info UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ResetDevice_OutputType

Name	Description	Schema
activation_info_id <i>optional</i>	UUID for activation info. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
fq_name <i>optional</i>	Fully qualified name for activation_info. Example : "string"	string

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string
tenant_access <i>optional</i>	Example : 0	integer(int32)

SshHostKeysSshHostKeyType

Name	Description	Schema
format <i>optional</i>	Format as sent by the device. These values are defined in the southbound API's YANG file. Example : "string"	enum (ssh-dsa, ssh-rsa)
key_data <i>optional</i>	Key file contents. Example : "string"	string

TimestampType

Timestamp for when authentication on this device will expire. This timesatmp indicates the latest time when this device can send a request to the bootstrap server without an activation code. If absent, the activation code is required when the device tries to access the bootstrap server's southbound API.

Type : integer

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

WebHookBasicAuthType

Name	Description	Schema
password <i>optional</i>	Password the bootstrap server should use when executing this web-hook. Example : "string"	string

Name	Description	Schema
username <i>optional</i>	Username the bootstrap server should use when executing this web-hook. Example : "string"	string

WebHookResultsWebHookResultType

Name	Description	Schema
name <i>optional</i>	Name of the web-hook at the time the notification was received. Example : "string"	string
response_body <i>optional</i>	Resultant HTTP response body. Example : "string"	string

WebHooksWebHookType

Name	Description	Schema
accept <i>optional</i>	The format web-hook will accept. Default : "application/xml" Example : "string"	enum (application/json, application/xml)
basic_auth <i>optional</i>	Example : "WebHookBasicAuthType"	WebHookBasicAuthType
name <i>optional</i>	An arbitrary name for the web-hook. Example : "string"	string
url <i>optional</i>	URL for the web-hook. The system POSTs a notification to the web-hook. The HTTP request body passed into the web-hook when it is executed is described in the 'juniper-bootstrap-server-webhook' YANG module. Example : "string"	string

YangUuidType

Device's UUID.

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string

Name	Description	Schema
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

[activation-info](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[activation-info{id}](#)

Name	Description	Schema
activation_code <i>optional</i>	Optional activation code for this device. If an activation code is set, the bootstrap server will require the device authenticate itself when it tries to access the bootstrap server's southbound API. Example : <code>"string"</code>	string
authentication_expiry_time <i>optional</i>	Timestamp for when authentication on this device will expire. This timesatmp indicates the latest time when this device can send a request to the bootstrap server without an activation code. If absent, the activation code is required when the device tries to access the bootstrap server's southbound API. Example : <code>"TimestampType"</code>	TimestampType
bootstrap_state <i>optional</i>	State of the bootstrap procedure. Example : <code>"ActivationInfoBootstrapStateType"</code>	ActivationInfoBootstrapStateType
configuration_handling <i>optional</i>	This enumeration indicates how the server should process the provided configuration. When not specified, the device MAY determine how to process the configuration using other means (e.g., vendor-specific metadata). Example : <code>"ActivationInfoConfigurationHandlingType"</code>	ActivationInfoConfigurationHandlingType
device_uuid <i>optional</i>	Device's UUID. Example : <code>"YangUuidType"</code>	YangUuidType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
notifications <i>optional</i>	Container element of notifications. Example : <code>"ActivationInfoNotificationsType"</code>	ActivationInfoNotificationsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
post_configuration_script <i>optional</i>	A script that, when present, is executed after the configuration has been processed. Example : <code>"[_csp-activation-service-central_scripttype]"</code>	ScriptType

Name	Description	Schema
pre_configuration_script <i>optional</i>	A script that, when present, is executed after the boot-image is verified but before the configuration has been processed. Example : "[_csp-activation-service-central_scripttype]"	ScriptType
unique_id <i>optional</i>	Device's unique identifier, usually the serial number. Example : "string"	string
web_hooks <i>optional</i>	All web hooks configured at the time a notification is received will be executed. The resulting HTTP status codes are recorded in the web-hook-results container. Example : "ActivationInfoWebHooksType"	ActivationInfoWebHooksType

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

authenticate-device-input

Name	Description	Schema
input <i>optional</i>	Example : "AuthenticateDevice_InputType"	AuthenticateDevice_InputType

authenticate-device-output

Name	Description	Schema
output <i>optional</i>	Example : "AuthenticateDevice_OutputType"	AuthenticateDevice_OutputType

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

`config-root{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-activation-service-central_config-root_id_domain"]</code>	<code>< config-root{id}_domain ></code> array
global-system-config <i>optional</i>	Example : <code>["_csp-activation-service-central_config-root_id_global-system-config"]</code>	<code>< config-root{id}_global-system-config ></code> array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`domain`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`domain{id}`

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-activation-service-central_domain_id_api-access-list"]</code>	<code>< domain{id}_api-access-list ></code> array
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-activation-service-central_domain_id_namespace"]</code>	<code>< domain{id}_namespace ></code> array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
project <i>optional</i>	Example : <code>["_csp-activation-service-central_domain_id_project"]</code>	<code>< domain{id}_project ></code> array

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

project{id}

Name	Description	Schema
activation-info <i>optional</i>	Example : ["[_csp-activation-service-central_project_id_activation-info]"]	< project{id}_activation-info > array
api-access-list <i>optional</i>	Example : ["[_csp-activation-service-central_project_id_api-access-list]"]	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[_csp-activation-service-central_project_id_namespace]"]	< project{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
quota <i>optional</i>	Example : "QuotaType"	QuotaType

reset-device-input

Name	Description	Schema
input <i>optional</i>	Example : "ResetDevice_InputType"	ResetDevice_InputType

reset-device-output

Name	Description	Schema
output <i>optional</i>	Example : "ResetDevice_OutputType"	ResetDevice_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string

Name	Description	Schema
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.2. Configuration Management Service (Central)

9.2.1. Overview

Use the Central Configuration Management APIs to get information about and manage centralized deployments.

Version information

Version : 3.0

URI scheme

BasePath : /cms-central

Schemes : HTTP

Tags

- **publish_configuration** : Computes the diff between the candidate config and the most recently published configuration, translates this diff into delta concrete config and pushes this into regional CMS. If there is no previously published configuration, then the candidate config is translated into concrete config and pushed into regional CMS. This is a synchronous RPC and will return after publishing all the configs.
- **unpublish_configuration_async** : Deletes all the undeployed published config data belong to the abstract config at the center and the undeployed concrete config change at the region. This is an asynchronous RPC. Supports unpublish operation of all the dependent configs in one RPC call.
- **unpublish_configuration** : Deletes all the undeployed published config data belonging to the abstract config at central and the undeployed concrete config change at regional. This RPC unpublishes configs synchronously.
- **get_rendered_config_data** : Returns the rendered config data diff from the regional concrete config for the specified published config data.
- **get_merged_concrete_config** : Returns the merged concrete config from the concrete config object in the regional database that corresponds to the abstract config passed. Merged concrete config represents the combined concrete config copy of all the changes pushed to the device. Every time the concrete config is deployed the merged config is merged with the concrete config change (diff) that was deployed to the device.
- **publish_configuration_async** : Computes the diff between the candidate config and the most recently published configuration, translates this diff into delta concrete config and pushes this into regional CMS. If there is no previously published configuration, then the candidate config is translated into concrete config and pushed into regional CMS. This is an asynchronous RPC that returns the request ID, which can be used

to find information in rabbitmq.

- `rollback_configuration` : Uses the previously published config data to rollback the configuration changes. This RPC currently will be limited in functionality to just rollback the configuration publish operation. An explicit deploy operation will have to be done to deploy the rolled back changes.
- `get_config_change_diff` : Given list of config change (diff) UUIDs, this RPC returns concatenated config change diffs that are deployed on the device.
- `deploy_configuration` : Deploys abstract config object to a single device component. Does not use job framework and can be used within other jobs for the purpose of deploying the config. All the undeployed published changes in the abstract config object will be deployed in a single commit. This is an asynchronous API that can be called by other micro-services in a job.
- `create_discovered_config` : Takes in the list of discovered config data as input and creates the corresponding abstract configs in the deployed state with the discovered config data. The API will create all the internal data objects and move them to a DEPLOYED config state. This is an asynchronous API.

Produces

- `application/json`

9.2.2. Resources

Create_discovered_config

Takes in the list of discovered config data as input and creates the corresponding abstract configs in the deployed state with the discovered config data. The API will create all the internal data objects and move them to a DEPLOYED config state. This is an asynchronous API.

Execute `create_discovered_config` RPC

```
POST /cms-central/create_discovered_config
```

Parameters

Type	Name	Description	Schema	Default
Body	<code>input</code> <i>optional</i>		create_discovered_config-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	create_discovered_config-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/create_discovered_config"
```

Request body

```
{
  "input" : {
    "discovered_config" : [ {
      "device_uuid" : "string",
      "config_name" : "string",
      "template_uuid" : "string",
      "abstract_config_uuid" : "string"
    } ],
    "url" : "string",
    "request_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "request_id" : "string"
  }
}
```

Deploy_configuration

Deploys abstract config object to a single device component. Does not use job framework and can be used within other jobs for the purpose of deploying the config. All the undeployed published changes in the abstract config object will be deployed in a single commit. This is an asynchronous API that can be called by other micro-services in a job.

Execute deploy_configuration RPC

POST /cms-central/deploy_configuration

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		deploy_configuration-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	deploy_configuration-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/cms-central/deploy_configuration"`

Request body

```
{
  "input" : {
    "abstract_configs" : [ {
      "fqname" : "string",
      "uuid" : "string"
    } ],
    "url" : "string",
    "deploy_config_in_single_commit" : true,
    "request_id" : "string",
    "is_job" : true,
    "auto_deploy_dependent_configs" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "request_id" : "string"
  }
}
```

Get_config_change_diff

Given list of config change (diff) UUIDs, this RPC returns concatenated config change diffs that are deployed on the device.

Execute `get_config_change_diff` RPC

```
POST /cms-central/get_config_change_diff
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_config_change_diff-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_config_change_diff-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/get_config_change_diff"
```

Request body

```
{
  "input" : {
    "abstract_config_info" : {
      "fqname" : "string",
      "uuid" : "string"
    },
    "config_change" : [ {
      "config_change_uuid" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "config_diff" : "string"
  }
}
```

Get_merged_concrete_config

Returns the merged concrete config from the concrete config object in the regional database that corresponds to the abstract config passed. Merged concrete config represents the combined concrete config copy of all the changes pushed to the device. Every time the concrete config is deployed the merged config is merged with the concrete config change (diff) that was deployed to the device.

Execute `get_merged_concrete_config` RPC

```
POST /cms-central/get_merged_concrete_config
```

Parameters

Type	Name	Description	Schema	Default
Body	<code>input</code> <i>optional</i>		get_merged_concrete_config-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_merged_concrete_config-output

HTTP Code	Description	Schema
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/get_merged_concrete_config"
```

Request body

```
{
  "input" : {
    "abstract_config" : {
      "fqname" : "string",
      "uuid" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "merged_concrete_config" : "string"
  }
}
```

Get_rendered_config_data

Returns the rendered config data diff from the regional concrete config for the specified published config data.

Execute `get_rendered_config_data` RPC

POST /cms-central/get_rendered_config_data

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_rendered_config_data-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_rendered_config_data-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/cms-central/get_rendered_config_data"`

Request body

```
{
  "input" : {
    "published_config_data" : {
      "fname" : "string",
      "uuid" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : "<<_csp-cms-central_getrenderedconfigdata_outputtype>>"
}
```

Publish_configuration

Computes the diff between the candidate config and the most recently published configuration, translates this diff into delta concrete config and pushes this into regional CMS. If there is no previously published configuration, then the candidate config is translated into concrete config and pushed into regional CMS. This is a synchronous RPC and will return after publishing all the configs.

Execute publish_configuration RPC

```
POST /cms-central/publish_configuration
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		publish_configuration-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	publish_configuration-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/publish_configuration"
```

Request body

```
{
  "input" : {
    "abstract_configs" : [ {
      "fqname" : "string",
      "uuid" : "string",
      "is_force_publish" : true,
      "published_config_data_id" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "description" : "string",
    "details" : [ {
      "device_uuid" : "string",
      "abstract_config_name" : "string",
      "abstract_config_uuid" : "string",
      "published_config_data_uuid" : "string",
      "concrete_config_uuid" : "string",
      "config_change_uuid" : "string",
      "status" : "string",
      "description" : "string"
    } ]
  }
}
```

Publish_configuration_async

Computes the diff between the candidate config and the most recently published configuration, translates this diff into delta concrete config and pushes this into regional CMS. If there is no previously published configuration, then the candidate config is translated into concrete config and pushed into regional CMS. This is an asynchronous RPC that returns the request ID, which can be used to find information in rabbitmq.

Execute publish_configuration_async RPC

```
POST /cms-central/publish_configuration_async
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		publish_configuration_async-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	publish_configuration_async-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/publish_configuration_async"
```

Request body

```
{
  "input" : {
    "abstract_configs" : [ {
      "fqname" : "string",
      "uuid" : "string",
      "is_force_publish" : true,
      "published_config_data_id" : "string"
    } ],
    "url" : "string",
    "request_id" : "string",
    "auto_publish_dependent_config" : true
  }
}
```


Example HTTP response

Response 200

```
{
  "output" : {
    "request_id" : "string"
  }
}
```

Rollback_configuration

Uses the previously published config data to rollback the configuration changes. This RPC currently will be limited in functionality to just rollback the configuration publish operation. An explicit deploy operation will have to be done to deploy the rolled back changes.

Execute rollback_configuration RPC

```
POST /cms-central/rollback_configuration
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		rollback_configuration-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	rollback_configuration-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/rollback_configuration"
```

Request body

```
{
  "input" : {
    "published_config_data" : {
      "fqname" : "string",
      "uuid" : "string"
    },
    "published_config_data_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "published_config_data_uuid" : "string"
  }
}
```

Unpublish_configuration

Deletes all the undeployed published config data belonging to the abstract config at central and the undeployed concrete config change at regional. This RPC unpublishes configs synchronously.

Execute unpublish_configuration RPC

```
POST /cms-central/unpublish_configuration
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		unpublish_configuration-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	unpublish_configuration-output

HTTP Code	Description	Schema
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/unpublish_configuration"
```

Request body

```
{
  "input" : {
    "abstract_configs" : [ {
      "fqname" : "string",
      "uuid" : "string",
      "reset_candidate_config" : true
    } ]
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "status" : "string",
    "description" : "string",
    "details" : [ {
      "device_uuid" : "string",
      "abstract_config_name" : "string",
      "abstract_config_uuid" : "string",
      "unpublished_config_data" : {
        "published_config_data_uuid" : "string"
      },
      "status" : "string",
      "description" : "string"
    } ]
  }
}

```

Unpublish_configuration_async

Deletes all the undeployed published config data belong to the abstract config at the center and the undeployed concrete config change at the region. This is an asynchronous RPC. Supports unpublish operation of all the dependent configs in one RPC call.

Execute `unpublish_configuration_async` RPC

POST /cms-central/unpublish_configuration_async

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		unpublish_configuration_async-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	unpublish_configuration_async-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/cms-central/unpublish_configuration_async"
```

Request body

```
{
  "input" : {
    "abstract_configs" : [ {
      "fqname" : "string",
      "uuid" : "string",
      "reset_candidate_config" : true
    } ],
    "url" : "string",
    "request_id" : "string",
    "auto_unpublish_dependent_config" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "request_id" : "string"
  }
}
```

9.2.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

CreateDiscoveredConfigInputDiscoveredConfigType

Name	Description	Schema
abstract_config_uuid <i>optional</i>	This UUID will be used for the abstract config that will be created. Example : "string"	string
config_name <i>optional</i>	Name for the config that will be created. The name should follow the standard abstract config naming syntax - 'device_component_name/abstract_config_name'. Example : "string"	string
device_uuid <i>optional</i>	UUID of the parent device to which the config belongs to. Example : "string"	string
template_uuid <i>optional</i>	UUID of the template that the abstract config refers to. Example : "string"	string

CreateDiscoveredConfig_InputType

Name	Description	Schema
discovered_config <i>optional</i>	Example : ["CreateDiscoveredConfigInputDiscoveredConfigType"]	< CreateDiscoveredConfigInputDiscoveredConfigType > array
request_id <i>optional</i>	Optional unique ID to retrieve the notification when the RPC is complete. If this is not provided a unique auto-generated request ID will be returned. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
url <i>required</i>	AMQP URL where response message will be posted. Example : "string"	string

CreateDiscoveredConfig_OutputType

Name	Description	Schema
request_id <i>optional</i>	Unique ID to retrieve the notification when the RPC is complete. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeployConfigurationInputAbstractConfigsType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

DeployConfiguration_InputType

Name	Description	Schema
abstract_configs <i>optional</i>	Example : ["DeployConfigurationInputAbstractConfigsType"]	< DeployConfigurationInputAbstractConfigsType > array
auto_deploy_dependent_configs <i>optional</i>	If set to true, the dependent configs will be deployed along with this config. The inventory resource API is used to find the dependent configs. Example : true	boolean
deploy_config_in_single_commit <i>optional</i>	If set to true, will deploy all the config objects belonging to the same device component in a single commit. Otherwise they will be deployed in separate commits. Example : true	boolean
is_job <i>optional</i>	If set to true, the deployment is carried out as a job and the job id is returned in the output. Example : true	boolean
request_id <i>optional</i>	Optional unique ID to retrieve the notification when the deployment is complete. If this is not provided a unique auto generated request ID will be returned. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
url <i>optional</i>	AMQP URL where response message will be posted. Example : "string"	string

DeployConfiguration_OutputType

Name	Description	Schema
request_id <i>optional</i>	Unique ID to retrieve the notification when deployment is complete. When deployment is carried out as a job, this is the job ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DetailsUnpublishedConfigDataType

Name	Description	Schema
published_config_data_uuid <i>optional</i>	UUID of the published config data that was just deleted during the unpublish operation. Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

GetConfigChangeDiffInputAbstractConfigInfoType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

GetConfigChangeDiffInputConfigChangeType

Name	Description	Schema
config_change_uuid <i>optional</i>	Config change (diff) UUID. Example : "string"	string

GetConfigChangeDiff_InputType

Name	Description	Schema
abstract_config_info <i>optional</i>	Example : "GetConfigChangeDiffInputAbstractConfigInfoType"	GetConfigChangeDiffInputAbstractConfigInfoType
config_change <i>optional</i>	Example : ["GetConfigChangeDiffInputConfigChangeType"]	< GetConfigChangeDiffInputConfigChangeType > array

GetConfigChangeDiff_OutputType

Name	Description	Schema
config_diff <i>optional</i>	Concatenated config change diffs. Example : "string"	string

GetMergedConcreteConfigInputAbstractConfigType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

GetMergedConcreteConfig_InputType

Name	Description	Schema
abstract_config <i>optional</i>	Example : "GetMergedConcreteConfigInputAbstractConfigType"	GetMergedConcreteConfigInputAbstractConfigType

GetMergedConcreteConfig_OutputType

Name	Description	Schema
merged_concrete_config <i>optional</i>	Merged copy of the concrete config changes that has been deployed to the device till now. Example : "string"	string

GetRenderedConfigDataInputPublishedConfigDataType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

GetRenderedConfigData_InputType

Name	Description	Schema
published_config_data <i>optional</i>	Example : "GetRenderedConfigDataInputPublishedConfigDataType"	GetRenderedConfigDataInputPublishedConfigDataType

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

PermType

Name	Description	Schema
group <i>optional</i>	Example : <code>"string"</code>	string
owner <i>optional</i>	Example : <code>"string"</code>	string

PermType2

Name	Description	Schema
owner <i>optional</i>	Example : <code>"string"</code>	string
share <i>optional</i>	Example : <code>["ShareType"]</code>	< ShareType > array

PublishConfigurationAsyncInputAbstractConfigsType

Name	Description	Schema
fqname <i>optional</i>	Example : <code>"string"</code>	string
is_force_publish <i>optional</i>	When set to true, converts the candidate config as is into concrete config without finding the diff with the last published configuration. Example : <code>true</code>	boolean
published_config_data_id <i>optional</i>	Optional identifier for the published config data that will be newly created during the publish operation. If this field is missing then a UUID will be auto-generated. Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

PublishConfigurationAsync_InputType

Name	Description	Schema
abstract_configs <i>optional</i>	Example : <code>["PublishConfigurationAsyncInputAbstractConfigsType"]</code>	< PublishConfigurationAsyncInputAbstractConfigsType > array
auto_publish_dependent_config <i>optional</i>	If set to true, the dependent configs are published first, and then the abstract config itself is published. Example : <code>true</code>	boolean
request_id <i>optional</i>	Optional unique ID to retrieve the notification when the publish is complete. If this is not provided, a unique auto-generated request ID is returned. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
url <i>optional</i>	AMQP URL where response message will be posted. Example : <code>"string"</code>	string

PublishConfigurationAsync_OutputType

Name	Description	Schema
request_id <i>optional</i>	Unique ID to retrieve the notification when the publish is complete. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

PublishConfigurationInputAbstractConfigsType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
is_force_publish <i>optional</i>	When set to true, converts the candidate config as-is into concrete config without finding the diff with the last published configuration. Example : true	boolean
published_config_data_id <i>optional</i>	Optional identifier for the published config data that will be newly created during the publish operation. If this field is missing then a UUID will be auto generated. Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

PublishConfigurationOutputDetailsType

Name	Description	Schema
abstract_config_name <i>optional</i>	Abstract config name. Example : "string"	string
abstract_config_uuid <i>optional</i>	Abstract config UUID. Example : "string"	string
concrete_config_uuid <i>optional</i>	Concrete config UUID at the regional level. Example : "string"	string
config_change_uuid <i>optional</i>	UUID of the config change that is created at the regional level during the publish. Example : "string"	string
description <i>optional</i>	Holds the error/status message. Example : "string"	string
device_uuid <i>optional</i>	Device identifier. Example : "string"	string
published_config_data_uuid <i>optional</i>	Latest published config data UUID at central CMS. Example : "string"	string
status <i>optional</i>	Success/failure for the publish operation. Example : "string"	enum (SUCCESS, FAILURE)

PublishConfiguration_InputType

Name	Description	Schema
abstract_configs <i>optional</i>	Example : [<code>"PublishConfigurationInputAbstractConfigsType"]</code>	<code>< PublishConfigurationInputAbstractConfigsType ></code> array

PublishConfiguration_OutputType

Name	Description	Schema
description <i>optional</i>	Holds the generic error message or warnings. Example : <code>"string"</code>	string
details <i>optional</i>	Example : [<code>"PublishConfigurationOutputDetailsType"]</code>	<code>< PublishConfigurationOutputDetailsType ></code> array
status <i>optional</i>	Indicates success/failure of the publish API. Example : <code>"string"</code>	enum (SUCCESS, FAILURE)

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string

Name	Description	Schema
rule_object <i>optional</i>	Example : "string"	string
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

RollbackConfigurationInputPublishedConfigDataType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

RollbackConfiguration_InputType

Name	Description	Schema
published_conf ig_data <i>optional</i>	Example : "RollbackConfigurationInputPublishedConfigDataType"	RollbackConfigurationInputPublishedConfigDataType
published_conf ig_data_id <i>optional</i>	Optional identifier for the published config data that will be newly created during the rollback operation. If this field is missing then a UUID will be auto generated. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

RollbackConfiguration_OutputType

Name	Description	Schema
published_conf ig_data_uuid <i>optional</i>	ID of the newly published config data after the rollback. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string

UnpublishConfigurationAsyncInputAbstractConfigsType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
reset_candidate_config <i>optional</i>	When set to true, the candidate config belonging to the abstract configuration will be reset to the last deployed configuration. If there are no configurations that are already deployed, it is empty. Example : true	boolean

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

UnpublishConfigurationAsync_InputType

Name	Description	Schema
abstract_configs <i>optional</i>	Example : <code>["UnpublishConfigurationAsyncInputAbstractConfigsType"]</code>	< UnpublishConfigurationAsyncInputAbstractConfigsType > array
auto_unpublish_dependent_config <i>optional</i>	If set to true, the dependent configs are unpublished first and then the abstract config itself is unpublished. Example : <code>true</code>	boolean
request_id <i>optional</i>	Optional unique ID to retrieve the notification when the unpublish is complete. If this is not provided a unique auto generated request ID is returned. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
url <i>optional</i>	AMQP URL where response message will be posted. Example : <code>"string"</code>	string

UnpublishConfigurationAsync_OutputType

Name	Description	Schema
request_id <i>optional</i>	Unique ID to retrieve the notification when the unpublish is complete. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

UnpublishConfigurationInputAbstractConfigsType

Name	Description	Schema
fqname <i>optional</i>	Example : <code>"string"</code>	string
reset_candidate_config <i>optional</i>	When set to true, the candidate config belonging to the abstract config is reset to the last deployed configuration. If there are no configurations that are already deployed, it is empty. Example : <code>true</code>	boolean
uuid <i>optional</i>	Example : <code>"string"</code>	string

UnpublishConfigurationOutputDetailsType

Name	Description	Schema
abstract_config_name <i>optional</i>	Abstract config name. Example : <code>"string"</code>	string

Name	Description	Schema
abstract_config_uuid <i>optional</i>	Abstract config uuid. Example : "string"	string
description <i>optional</i>	Holds the error/status message. Example : "string"	string
device_uuid <i>optional</i>	Device identifier. Example : "string"	string
status <i>optional</i>	Indicates success/failure for the unpublish operation. Example : "string"	enum (SUCCESS, FAILURE)
unpublished_config_data <i>optional</i>	Example : "DetailsUnpublishedConfigDataType"	DetailsUnpublishedConfigDataType

UnpublishConfiguration_InputType

Name	Description	Schema
abstract_configs <i>optional</i>	Example : ["UnpublishConfigurationInputAbstractConfigsType"]	< UnpublishConfigurationInputAbstractConfigsType > array

UnpublishConfiguration_OutputType

Name	Description	Schema
description <i>optional</i>	Holds the generic error message or warnings. Example : "string"	string
details <i>optional</i>	Example : ["UnpublishConfigurationOutputDetailsType"]	< UnpublishConfigurationOutputDetailsType > array
status <i>optional</i>	Indicates success/failure of the unpublish API. Example : "string"	enum (SUCCESS, FAILURE)

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
domain <i>optional</i>	Example : ["_csp-cms-central_config-root_id_domain"]	< config-root{id}_domain > array

Name	Description	Schema
global-system-config <i>optional</i>	Example : ["[_csp-cms-central_config-root_id_global-system-config]"]	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

create_discovered_config-input

Name	Description	Schema
input <i>optional</i>	Example : "CreateDiscoveredConfig_InputType"	CreateDiscoveredConfig_InputType

create_discovered_config-output

Name	Description	Schema
output <i>optional</i>	Example : "CreateDiscoveredConfig_OutputType"	CreateDiscoveredConfig_OutputType

deploy_configuration-input

Name	Description	Schema
input <i>optional</i>	Example : "DeployConfiguration_InputType"	DeployConfiguration_InputType

deploy_configuration-output

Name	Description	Schema
output <i>optional</i>	Example : "DeployConfiguration_OutputType"	DeployConfiguration_OutputType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-cms-central_domain_id_api-access-list]"]	< domain{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string

Name	Description	Schema
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-cms-central_domain_id_namespace"]</code>	<code>< domain{id}_namespace > array</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
project <i>optional</i>	Example : <code>["_csp-cms-central_domain_id_project"]</code>	<code>< domain{id}_project > array</code>

`get_config_change_diff-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetConfigChangeDiff_InputType"</code>	GetConfigChangeDiff_InputType

`get_config_change_diff-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetConfigChangeDiff_OutputType"</code>	GetConfigChangeDiff_OutputType

`get_merged_concrete_config-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetMergedConcreteConfig_InputType"</code>	GetMergedConcreteConfig_InputType

`get_merged_concrete_config-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetMergedConcreteConfig_OutputType"</code>	GetMergedConcreteConfig_OutputType

`get_rendered_config_data-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetRenderedConfigData_InputType"</code>	GetRenderedConfigData_InputType

`get_rendered_config_data-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"[_csp-cms-central_getrenderedconfigdata_outputtype]"</code>	GetRenderedConfigData_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-cms-central_project_id_api-access-list]"]	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[_csp-cms-central_project_id_namespace]"]	< project{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
quota <i>optional</i>	Example : "QuotaType"	QuotaType

publish_configuration-input

Name	Description	Schema
input <i>optional</i>	Example : "PublishConfiguration_InputType"	PublishConfiguration_InputType

publish_configuration-output

Name	Description	Schema
output <i>optional</i>	Example : "PublishConfiguration_OutputType"	PublishConfiguration_OutputType

publish_configuration_async-input

Name	Description	Schema
input <i>optional</i>	Example : "PublishConfigurationAsync_InputType"	PublishConfigurationAsync_InputType

publish_configuration_async-output

Name	Description	Schema
output <i>optional</i>	Example : "PublishConfigurationAsync_OutputType"	PublishConfigurationAsync_OutputType

rollback_configuration-input

Name	Description	Schema
input <i>optional</i>	Example : "RollbackConfiguration_InputType"	RollbackConfiguration_InputType

rollback_configuration-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"RollbackConfiguration_OutputType"</code>	RollbackConfiguration_OutputType

`unpublish_configuration-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"UnpublishConfiguration_InputType"</code>	UnpublishConfiguration_InputType

`unpublish_configuration-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"UnpublishConfiguration_OutputType"</code>	UnpublishConfiguration_OutputType

`unpublish_configuration_async-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"UnpublishConfigurationAsync_InputType"</code>	UnpublishConfigurationAsync_InputType

`unpublish_configuration_async-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"UnpublishConfigurationAsync_OutputType"</code>	UnpublishConfigurationAsync_OutputType

`yang-schema`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`yang-schema{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
es-schema <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
json-schema <i>optional</i>	Example : <code>"string"</code>	string
module-name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
namespace <i>optional</i>	Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
revision <i>optional</i>	Example : <code>"string"</code>	string
yin-schema <i>optional</i>	Example : <code>"string"</code>	string

9.3. Device Management Service (Central)

9.3.1. Overview

Data model of Central CSP Device Management.

Version information

Version : 3.0

URI scheme

BasePath : /dms-central

Schemes : HTTP

Tags

- `delete_license_single_device` : Use to delete license, by license ID, on single device.
- `import_device_profiles` : This RPC is used to import device profiles and device templates.
- `update_model_device` : Update a model device which will be activated at a later time. This is a synchronous API.
- `discover_single_device` : Used to discover one device.
- `install_license_single_device` : Used to install license on a single device.
- `activate_device` : Used to activate an added model device. The device must have been added previously and be ready for activation. If a URL is passed, then notification response is sent to that URL. If no URL is passed, you are expected to listen for the device state change notification to be returned.
- `resolve_device_profile` : This RPC is used to resolve templates and resources of a specified workflow in a device profile.
- `update_device_info` : Update device info.
- `add_model_device` : Creates a model device which will be activated at a later time.
- `delete_device` : RPC call to delete device.

Produces

- `application/json`

9.3.2. Resources

Activate_device

Used to activate an added model device. The device must have been added previously and be ready for activation. If a URL is passed, then notification response is sent to that URL. If no URL is passed, you are expected to listen for the device state change notification to be returned.

Execute `activate_device` RPC

```
POST /dms-central/activate_device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		activate_device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	activate_device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/activate_device"
```

Request body


```
{
  "input" : {
    "device_id" : "string",
    "url" : "string",
    "discover_resources" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "requestid" : "string"
  }
}
```

Add_model_device

Creates a model device which will be activated at a later time.

Execute add_model_device RPC

```
POST /dms-central/add_model_device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		add_model_device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	add_model_device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/add_model_device"
```

Request body

```

{
  "input" : {
    "region" : "string",
    "device_info" : [ {
      "device_id" : "string",
      "tenant_uuid" : "string",
      "name" : "string",
      "desc" : "string",
      "serial" : "string",
      "family" : "string",
      "platform" : "string",
      "vendor" : "string",
      "activation_info" : {
        "booting_uuid" : "string",
        "activation_code_enabled" : true,
        "activation_code" : "string",
        "configuration_handling" : "string"
      },
      "stageone_config" : {
        "template_uuid" : "string",
        "concrete_config" : "string"
      },
      "mgmt_conn_info" : {
        "connection" : {
          "name" : "string",
          "ip" : "string",
          "ip_info" : {
            "ip" : "string",
            "hostname" : "string"
          },
          "conn_init_type" : "string",
          "port" : "string",
          "conn_type" : "string",
          "secret_key" : "string",
          "authentication" : {
            "username" : "string",
            "password" : "string",
            "userid" : "string"
          }
        }
      }
    } ]
  }
}

```

Example HTTP response

Response 200

```
{
  "output" : {
    "device_ids" : [ {
      "device_id" : "string",
      "response" : "string",
      "reason" : "string"
    } ]
  }
}
```

Delete_device

RPC call to delete device.

Execute delete_device RPC

```
POST /dms-central/delete_device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		delete_device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	delete_device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/delete_device"
```

Request body

```
{
  "input" : {
    "device_ids" : [ {
      "device_id" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "device_ids" : [ {
      "device_id" : "string",
      "response" : "string",
      "reason" : "string"
    } ]
  }
}
```

Delete_license_single_device

Use to delete license, by license ID, on single device.

Execute delete_license_single_device RPC

```
POST /dms-central/delete_license_single_device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		delete_license_single_device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	delete_license_single_device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/delete_license_single_device"
```

Request body

```
{
  "input" : {
    "license_id" : "string",
    "device_id" : "string",
    "component_name" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "device_id" : "string",
    "response" : "string",
    "reason" : "string"
  }
}
```

Discover_single_device

Used to discover one device.

Execute `discover_single_device` RPC

```
POST /dms-central/discover_single_device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		discover_single_device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	discover_single_device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/discover_single_device"
```

Request body

```
{
  "input" : {
    "requestid" : "string",
    "name" : "string",
    "device_ip" : "string",
    "device_hostname" : "string",
    "device_id" : "string",
    "region" : "string",
    "url" : "string",
    "tenant_uuid" : "string",
    "family" : "string",
    "authentication" : {
      "username" : "string",
      "password" : "string",
      "userid" : "string"
    },
    "gateway_device" : "string",
    "discover_resources" : true,
    "is_job" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "requestid" : "string",
    "job_id" : "string"
  }
}
```

Import_device_profiles

This RPC is used to import device profiles and device templates.

Execute import_device_profiles RPC

```
POST /dms-central/import_device_profiles
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		import_device_profiles-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	import_device_profiles-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/import_device_profiles"
```

Request body

```
{
  "input" : "<<_csp-dms-central_importdeviceprofiles_inputtype>>"
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "message" : "string",
    "failed_list" : [ {
      "name" : "string",
      "reason" : "string"
    } ]
  }
}
```

Install_license_single_device

Used to install license on a single device.

Execute install_license_single_device RPC

POST /dms-central/install_license_single_device

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		install_license_single_device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	install_license_single_device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/install_license_single_device"
```

Request body

```
{
  "input" : {
    "license_id" : "string",
    "file_url" : "string",
    "device_id" : "string",
    "component_name" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "device_id" : "string",
    "response" : "string",
    "reason" : "string"
  }
}
```

Resolve_device_profile

This RPC is used to resolve templates and resources of a specified workflow in a device profile.

Execute resolve_device_profile RPC

```
POST /dms-central/resolve_device_profile
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		resolve_device_profile-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	resolve_device_profile-output

HTTP Code	Description	Schema
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/resolve_device_profile"
```

Request body

```
{
  "input" : {
    "device_profile_id" : "string",
    "workflow_name" : "string",
    "parameters" : [ {
      "str_value" : "string",
      "name" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "resources" : "string",
    "config_templates" : [ {
      "input_param" : "string",
      "copy_input_param_from" : "string",
      "name" : "string",
      "display_name" : "string",
      "hide" : true,
      "device_component_name" : "string",
      "template_uuid" : "string",
      "conditional_template_uuid" : "string",
      "initial_config" : {
        "ztp" : "string",
        "configuration" : "string"
      }
    } ]
  }
}
```

Update_device_info

Update device info.

Execute `update_device_info` RPC

POST /dms-central/update_device_info

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		update_device_info-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	update_device_info-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/dms-central/update_device_info"
```

Request body

```
{
  "input" : {
    "device_id" : "string",
    "component_name" : "string",
    "device_new_ip" : "string",
    "url" : "string",
    "authentication" : {
      "username" : "string",
      "password" : "string",
      "userid" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "requestid" : "string"
  }
}
```

Update_model_device

Update a model device which will be activated at a later time. This is a synchronous API.

Execute update_model_device RPC

POST /dms-central/update_model_device

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		update_model_device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	update_model_device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/dms-central/update_model_device"`

Request body

```

{
  "input" : {
    "device_info" : [ {
      "device_id" : "string",
      "tenant_uuid" : "string",
      "name" : "string",
      "desc" : "string",
      "serial" : "string",
      "family" : "string",
      "platform" : "string",
      "vendor" : "string",
      "activation_info" : {
        "booting_uuid" : "string",
        "activation_code_enabled" : true,
        "activation_code" : "string",
        "configuration_handling" : "string"
      },
      "stageone_config" : {
        "template_uuid" : "string",
        "concrete_config" : "string"
      },
      "mgmt_conn_info" : {
        "connection" : {
          "name" : "string",
          "ip" : "string",
          "ip_info" : {
            "ip" : "string",
            "hostname" : "string"
          },
          "conn_init_type" : "string",
          "port" : "string",
          "conn_type" : "string",
          "secret_key" : "string",
          "authentication" : {
            "username" : "string",
            "password" : "string",
            "userid" : "string"
          }
        }
      }
    }
  ]
}

```


Example HTTP response

Response 200

```
{
  "output" : {
    "device_ids" : [ {
      "device_id" : "string",
      "response" : "string",
      "reason" : "string"
    } ]
  }
}
```

9.3.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

ActivateComponent_InputType

Name	Description	Schema
component_name <i>optional</i>	Add-on component name as specified in the device-family YANG data model. Example : "string"	string
device_id <i>optional</i>	Device ID of device containing the component to be activated. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
url <i>optional</i>	AMQP URL where response message will be posted. Example : "string"	string

ActivateComponent_OutputType

Name	Description	Schema
requestid <i>optional</i>	A generated unique id. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ActivateDevice_InputType

Name	Description	Schema
device_id <i>optional</i>	Device ID of the device to be activated. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
discover_resources <i>optional</i>	If set to true, the discover device workflow performs resource discovery. If set to false (default), resource discovery is not performed. Example : true	boolean
url <i>optional</i>	AMQP URL where response message is posted. If URL is not indicated, no notification response is posted. Example : "string"	string

ActivateDevice_OutputType

Name	Description	Schema
requestid <i>optional</i>	A generated unique request ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

AddModelDeviceInputDeviceInfoType

Name	Description	Schema
activation_info <i>optional</i>	Example : "DeviceInfoActivationInfoType"	DeviceInfoActivationInfoType
desc <i>optional</i>	Device description. Example : "string"	string
device_id <i>optional</i>	Device UUID. If this is specified then the device object in central and regional will be created with the specified UUID. Example : "string"	string
family <i>optional</i>	Device family. Example : "string"	string
mgmt_conn_info <i>optional</i>	Example : "DeviceInfoMgmtConnInfoType"	DeviceInfoMgmtConnInfoType
name <i>optional</i>	Device name. Example : "string"	string
platform <i>optional</i>	Device platform. Example : "string"	string

Name	Description	Schema
serial <i>optional</i>	Serial ID of the model device. Example : "string"	string
stageone_config <i>optional</i>	Example : "DeviceInfoStageoneConfigType"	DeviceInfoStageoneConfigType
tenant_uuid <i>optional</i>	Tenant to which the device belongs. Example : "string"	string
vendor <i>optional</i>	Device vendor. Example : "string"	string

AddModelDeviceOutputDeviceIdsType

Name	Description	Schema
device_id <i>optional</i>	Device ID of modeled device. Example : "string"	string
reason <i>optional</i>	Reason for failure, if available. Example : "string"	string
response <i>optional</i>	Response status. Example : "string"	enum (SUCCESS, FAILURE)

AddModelDevice_InputType

Name	Description	Schema
device_info <i>optional</i>	Example : ["AddModelDeviceInputDeviceInfoType"]	< AddModelDeviceInputDeviceInfoType > array
region <i>required</i>	Region to which device belongs. Example : "string"	string

AddModelDevice_OutputType

Name	Description	Schema
device_ids <i>optional</i>	Example : ["AddModelDeviceOutputDeviceIdsType"]	< AddModelDeviceOutputDeviceIdsType > array

ConfigTemplatesInitialConfigType

Name	Description	Schema
configuration <i>optional</i>	Template input parameters that are used to create Stage-2 abstract config Example : "string"	string
ztp <i>optional</i>	if set true, the initial config will get deployed during ZTP Default : "false" Example : "string"	string

ConnectionAuthenticationType

Name	Description	Schema
password <i>optional</i>	Example : <code>"string"</code>	string
userid <i>optional</i>	Example : <code>"string"</code>	string
username <i>optional</i>	Example : <code>"string"</code>	string

ConnectionIpInfoType

Name	Description	Schema
hostname <i>optional</i>	Example : <code>"string"</code>	string
ip <i>optional</i>	Example : <code>"string"</code>	string

DeleteDeviceInputDeviceIdsType

Name	Description	Schema
device_id <i>optional</i>	Device ID to be deleted. Example : <code>"string"</code>	string

DeleteDeviceOutputDeviceIdsType

Name	Description	Schema
device_id <i>optional</i>	IDs of devices to be deleted. Example : <code>"string"</code>	string
reason <i>optional</i>	Reason for failure, if available. Example : <code>"string"</code>	string
response <i>optional</i>	Response status. Example : <code>"string"</code>	enum (SUCCESS, FAILURE)

DeleteDevice_InputType

Name	Description	Schema
device_ids <i>optional</i>	Example : <code>["DeleteDeviceInputDeviceIdsType"]</code>	< DeleteDeviceInputDeviceIdsType > array

DeleteDevice_OutputType

Name	Description	Schema
device_ids <i>optional</i>	Example : <code>["DeleteDeviceOutputDeviceIdsType"]</code>	< DeleteDeviceOutputDeviceIdsType > array

DeleteLicenseSingleDevice_InputType

Name	Description	Schema
component_name <i>optional</i>	Component on the device where the license will be deleted. Example : "string"	string
device_id <i>optional</i>	Device ID of the device where the license will be deleted. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
license_id <i>optional</i>	License ID for the license to be deleted on the device. Example : "string"	string

DeleteLicenseSingleDevice_OutputType

Name	Description	Schema
device_id <i>optional</i>	Device ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Reason for failure, if available. Example : "string"	string
response <i>optional</i>	Status of license installation on the device. Example : "string"	enum (EXISTS, SUCCESS, FAILURE)

DeviceInfoActivationInfoType

Name	Description	Schema
activation_code <i>optional</i>	Activation code to use to activate device. Example : "string"	string
activation_code_enabled <i>optional</i>	Indicates whether activation code is enabled or disabled. Example : true	boolean
booting_uuid <i>optional</i>	Device boot image UUID. Example : "string"	string
configuration_handling <i>optional</i>	This enumeration indicates how the server should process the provided configuration. When not specified, the device MAY determine how to process the configuration using other means like vendor-specific metadata. Example : "string"	enum (merge, replace)

DeviceInfoMgmtConnInfoType

Name	Description	Schema
connection <i>optional</i>	Example : "MgmtConnInfoConnectionType"	MgmtConnInfoConnectionType

DeviceInfoStageoneConfigType

Name	Description	Schema
concrete_config <i>optional</i>	Example : <code>"string"</code>	string
template_uuid <i>optional</i>	Example : <code>"string"</code>	string

DiscoverSingleDeviceInputAuthenticationType

Name	Description	Schema
password <i>optional</i>	Example : <code>"string"</code>	string
userid <i>optional</i>	Example : <code>"string"</code>	string
username <i>optional</i>	Example : <code>"string"</code>	string

DiscoverSingleDevice_InputType

Name	Description	Schema
authentication <i>optional</i>	Example : <code>"DiscoverSingleDeviceInputAuthenticationType"</code>	DiscoverSingleDeviceInputAuthenticationType
device_hostname <i>optional</i>	Device hostname. Either device_ip or device_hostname must be provided. Example : <code>"string"</code>	string
device_id <i>optional</i>	If this is specified then the device object in central and regional will be created with the specified uuid. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
device_ip <i>optional</i>	Device ip address. Either device_ip or device_hostname must be provided. Example : <code>"string"</code>	string
discover_resources <i>optional</i>	If set to true, the discover-device workflow will perform resource discovery as part of the workflow. If set to false (default), the discover resources step will not be performed. Example : <code>true</code>	boolean
family <i>required</i>	Device family. Example : <code>"string"</code>	string
gateway_device <i>optional</i>	UUID of the device through which the device being discovered can be reached. If this input parameter is used, it implies that the device_ip parameter is not directly reachable from CSP and instead is reachable using an SSH connection to the primary component of the gateway_device. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
is_job <i>optional</i>	If set to true, the discovery is carried out as a job and the job ID is returned in the output. Example : <code>true</code>	boolean

Name	Description	Schema
name <i>optional</i>	Device name. Example : "string"	string
region <i>optional</i>	Region where devices are discovered. Example : "string"	string
requestid <i>optional</i>	If this is specified then the same request id will be returned in the output. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
tenant_uuid <i>optional</i>	Tenant to which the device belongs. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
url <i>optional</i>	AMQP URL where response message is posted. Example : "string"	string

DiscoverSingleDevice_OutputType

Name	Description	Schema
job_id <i>optional</i>	job_id of the created job. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
requestid <i>optional</i>	A generated unique ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

ExecuteDeviceTask_InputType

Name	Description	Schema
device_id <i>required</i>	Device ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

Name	Description	Schema
device_profile_id <i>required</i>	Device profile ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
management_default_gw <i>required</i>	Management default gateway of package. Example : "string"	string
management_ip <i>required</i>	Management IP prefix of package. Example : "string"	string
operation <i>required</i>	The operation of device task. Example : "string"	enum (start, stop, remove)
package_name <i>required</i>	Package image file name. Example : "string"	string
requestid <i>optional</i>	If this is specified then this request ID is returned in the output. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
url <i>optional</i>	AMQP URL where response message is posted. Example : "string"	string

ExecuteDeviceTask_OutputType

Name	Description	Schema
requestid <i>optional</i>	A generated unique ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

ImportDeviceProfilesOutputFailedListType

Name	Description	Schema
name <i>optional</i>	Name of the template. Example : "string"	string
reason <i>optional</i>	The reason why the import failed. Example : "string"	string

ImportDeviceProfiles__OutputType

Name	Description	Schema
failed_list <i>optional</i>	Example : ["ImportDeviceProfilesOutputFailedListType"]	< ImportDeviceProfilesOutputFailedListType > array
message <i>optional</i>	Detailed response message. Example : "string"	string
status <i>optional</i>	The standard error code. Example : "string"	enum (SUCCESS, FAILURE)

InstallLicenseAllDevices__OutputType

Name	Description	Schema
reason <i>optional</i>	Reason for failure, if available. Example : "string"	string
response <i>optional</i>	Overall operation status, SUCCESS or FAILURE. Example : "string"	enum (SUCCESS, FAILURE)

InstallLicenseSingleDevice__InputType

Name	Description	Schema
component_name <i>optional</i>	Component on the device where the license will be installed. Example : "string"	string
device_id <i>optional</i>	Device ID of the device where the license will be installed. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
file_url <i>optional</i>	License file URL on file server Example : "string"	string
license_id <i>optional</i>	License ID for the license to be installed on the device. Example : "string"	string

InstallLicenseSingleDevice__OutputType

Name	Description	Schema
device_id <i>optional</i>	Device ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

Name	Description	Schema
reason <i>optional</i>	Reason for failure, if available. Example : "string"	string
response <i>optional</i>	Status of license installation on the device. Example : "string"	enum (EXISTS, SUCCESS, FAILURE)

MgmtConnInfoConnectionType

Name	Description	Schema
authentication <i>optional</i>	Example : "ConnectionAuthenticationType"	ConnectionAuthenticationType
conn_init_type <i>optional</i>	Type of connection to the component. Default : "DIRECT" Example : "string"	enum (DIRECT, TUNNELED)
conn_type <i>optional</i>	Device connection type. Example : "string"	enum (DEVICE_INITIATED, CSP_INITIATED)
ip <i>optional</i>	This is obsolete, and please use ip_info instead. Example : "string"	string
ip_info <i>optional</i>	Example : "ConnectionIpInfoType"	ConnectionIpInfoType
name <i>optional</i>	Connection name, like JDM or JCP. Example : "string"	string
port <i>optional</i>	Device port. Example : "string"	string
secret_key <i>optional</i>	Secret key used for authentication for device initiated connection. Example : "string"	string

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
owner <i>optional</i>	Example : "string"	string

PermType2

Name	Description	Schema
owner <i>optional</i>	Example : "string"	string
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string
rule_object <i>optional</i>	Example : "string"	string
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

ResolveDeviceProfileInputParametersType

Name	Description	Schema
name <i>optional</i>	Parameter name. Example : "string"	string
str_value <i>optional</i>	Example : "string"	string

ResolveDeviceProfileOutputConfigTemplatesType

Name	Description	Schema
conditional_template_uuid <i>optional</i>	This optional field, if present, must be a Jinja template that resolves to a valid UUID. This field can be used to model cases where a given workflow wants to return different output templates based on different conditions. If this field is present and it resolves to a valid UUID, the resolved value of this field will override the value in template_uuid field. If the field is present but it resolves to an empty string at runtime, then the value in the template_uuid field is retained. Example : <code>"string"</code>	string
copy_input_param_from <i>optional</i>	Example : <code>"string"</code>	string
device_component_name <i>optional</i>	device component name such as 'JDM', 'JCP', or 'gw-router' Example : <code>"string"</code>	string
display_name <i>optional</i>	Display name in the UI for this template Example : <code>"string"</code>	string
hide <i>optional</i>	Do not show this template in the UI Example : <code>true</code>	boolean
initial_config <i>optional</i>	Example : <code>"ConfigTemplatesInitialConfigType"</code>	ConfigTemplatesInitialConfigType
input_param <i>optional</i>	Example : <code>"string"</code>	string
name <i>optional</i>	Config name Example : <code>"string"</code>	string
template_uuid <i>optional</i>	UUID of the config template Example : <code>"string"</code>	string

ResolveDeviceProfile_InputType

Name	Description	Schema
device_profile_id <i>optional</i>	Device Profile ID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
parameters <i>optional</i>	Example : <code>["ResolveDeviceProfileInputParametersType"]</code>	ResolveDeviceProfileInputParametersType < array >
workflow_name <i>optional</i>	Name of the workflow to use for looking up the workflow input data that is defined in this device profile. Example : <code>"string"</code>	string

ResolveDeviceProfile_OutputType

Name	Description	Schema
config_templates <i>optional</i>	Example : <code>["ResolveDeviceProfileOutputConfigTemplatesType"]</code>	ResolveDeviceProfileOutputConfigTemplatesType < array >

Name	Description	Schema
resources <i>optional</i>	list of resources to return after they gets resolved Example : "string"	string

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string

UpdateDeviceInfoInputAuthenticationType

Name	Description	Schema
password <i>optional</i>	Example : "string"	string
userid <i>optional</i>	Example : "string"	string
username <i>optional</i>	Example : "string"	string

UpdateDeviceInfo_InputType

Name	Description	Schema
authentication <i>optional</i>	Example : "UpdateDeviceInfoInputAuthenticationType"	UpdateDeviceInfoInputAuthenticationType
component_name <i>optional</i>	Device component name. If this is not specified then the changes will be updated to the primary component. Example : "string"	string
device_id <i>optional</i>	Device ID of device to update. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
device_new_ip <i>optional</i>	Device new ip address Example : "string"	string
url <i>optional</i>	AMQP URL where response message will be posted for the caller. Example : "string"	string

UpdateDeviceInfo_OutputType

Name	Description	Schema
requestid <i>optional</i>	A generated unique ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

UpdateModelDeviceInputDeviceInfoType

Name	Description	Schema
activation_info <i>optional</i>	Example : <code>"DeviceInfoActivationInfoType"</code>	DeviceInfoActivationInfoType
desc <i>optional</i>	Device description. Example : <code>"string"</code>	string
device_id <i>optional</i>	ID of device for which update is required. Example : <code>"string"</code>	string
family <i>optional</i>	Device family. Example : <code>"string"</code>	string
mgmt_conn_info <i>optional</i>	Example : <code>"DeviceInfoMgmtConnInfoType"</code>	DeviceInfoMgmtConnInfoType
name <i>optional</i>	Device name. Example : <code>"string"</code>	string
platform <i>optional</i>	Device platform. Example : <code>"string"</code>	string
serial <i>optional</i>	Serial ID of the model device. Example : <code>"string"</code>	string
stageone_config <i>optional</i>	Example : <code>"DeviceInfoStageoneConfigType"</code>	DeviceInfoStageoneConfigType
tenant_uuid <i>optional</i>	Tenant to which the device belongs. Example : <code>"string"</code>	string
vendor <i>optional</i>	Device vendor. Example : <code>"string"</code>	string

UpdateModelDeviceOutputDeviceIdsType

Name	Description	Schema
device_id <i>optional</i>	Device ID of modeled device. Example : <code>"string"</code>	string
reason <i>optional</i>	Reason for failure, if available. Example : <code>"string"</code>	string
response <i>optional</i>	Response status. Example : <code>"string"</code>	enum (SUCCESS, FAILURE)

UpdateModelDevice_InputType

Name	Description	Schema
device_info <i>optional</i>	Example : <code>["UpdateModelDeviceInputDeviceInfoType"]</code>	< UpdateModelDeviceInputDeviceInfoType > array

UpdateModelDevice_OutputType

Name	Description	Schema
device_ids <i>optional</i>	Example : ["UpdateModelDeviceOutputDeviceIdsType"]	< UpdateModelDeviceOutputDeviceIdsType > array

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

activate__component-input

Name	Description	Schema
input <i>optional</i>	Example : "ActivateComponent_InputType"	ActivateComponent_InputType

activate__component-output

Name	Description	Schema
output <i>optional</i>	Example : "ActivateComponent_OutputType"	ActivateComponent_OutputType

activate__device-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ActivateDevice_InputType"</code>	ActivateDevice_InputType

activate__device-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ActivateDevice_OutputType"</code>	ActivateDevice_OutputType

add__model__device-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"AddModelDevice_InputType"</code>	AddModelDevice_InputType

add__model__device-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"AddModelDevice_OutputType"</code>	AddModelDevice_OutputType

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : <code>"RbacRuleEntriesType"</code>	RbacRuleEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

`config-root{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-dms-central_config-root_id_domain"]</code>	<code>< config-root{id}_domain ></code> array
global-system-config <i>optional</i>	Example : <code>["_csp-dms-central_config-root_id_global-system-config"]</code>	<code>< config-root{id}_global-system-config ></code> array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`delete_device-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteDevice_InputType"</code>	DeleteDevice_InputType

`delete_device-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteDevice_OutputType"</code>	DeleteDevice_OutputType

`delete_license_single_device-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteLicenseSingleDevice_InputType"</code>	DeleteLicenseSingleDevice_InputType

`delete_license_single_device-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteLicenseSingleDevice_OutputType"</code>	DeleteLicenseSingleDevice_OutputType

`discover_single_device-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"DiscoverSingleDevice_InputType"</code>	DiscoverSingleDevice_InputType

discover_single_device-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DiscoverSingleDevice_OutputType"</code>	DiscoverSingleDevice_OutputType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-dms-central_domain_id_api-access-list"]</code>	<code>< domain{id}_api-access-list ></code> array
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-dms-central_domain_id_namespace"]</code>	<code>< domain{id}_namespace ></code> array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
project <i>optional</i>	Example : <code>["_csp-dms-central_domain_id_project"]</code>	<code>< domain{id}_project ></code> array

execute_device_task-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ExecuteDeviceTask_InputType"</code>	ExecuteDeviceTask_InputType

execute_device_task-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ExecuteDeviceTask_OutputType"</code>	ExecuteDeviceTask_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : <code>"string"</code>	string
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

import_device_profiles-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"[_csp-dms-central_importdeviceprofiles_inputtype]"</code>	ImportDeviceProfiles_InputType

import_device_profiles-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ImportDeviceProfiles_OutputType"</code>	ImportDeviceProfiles_OutputType

install_license_all_devices-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"[_csp-dms-central_installlicenseallddevices_inputtype]"</code>	InstallLicenseAllDevices_InputType

install_license_all_devices-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"InstallLicenseAllDevices_OutputType"</code>	InstallLicenseAllDevices_OutputType

install_license_single_device-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"InstallLicenseSingleDevice_InputType"</code>	InstallLicenseSingleDevice_InputType

install_license_single_device-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"InstallLicenseSingleDevice_OutputType"</code>	InstallLicenseSingleDevice_OutputType

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-dms-central_project_id_api-access-list"]</code>	<code>< project{id}_api-access-list ></code> array
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-dms-central_project_id_namespace"]</code>	<code>< project{id}_namespace ></code> array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
quota <i>optional</i>	Example : <code>"QuotaType"</code>	QuotaType

resolve_device_profile-input

Name	Description	Schema
input <i>optional</i>	Example : "ResolveDeviceProfile_InputType"	ResolveDeviceProfile_InputType

resolve_device_profile-output

Name	Description	Schema
output <i>optional</i>	Example : "ResolveDeviceProfile_OutputType"	ResolveDeviceProfile_OutputType

update_device_info-input

Name	Description	Schema
input <i>optional</i>	Example : "UpdateDeviceInfo_InputType"	UpdateDeviceInfo_InputType

update_device_info-output

Name	Description	Schema
output <i>optional</i>	Example : "UpdateDeviceInfo_OutputType"	UpdateDeviceInfo_OutputType

update_model_device-input

Name	Description	Schema
input <i>optional</i>	Example : "UpdateModelDevice_InputType"	UpdateModelDevice_InputType

update_model_device-output

Name	Description	Schema
output <i>optional</i>	Example : "UpdateModelDevice_OutputType"	UpdateModelDevice_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string

Name	Description	Schema
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.4. Fault and Performance Monitoring (FMPM) Provider.

9.4.1. Overview

As a part of fault and performance monitoring services, these APIs implement the provisioning interface.

Version information

Version : 3.0

URI scheme

BasePath : /fmpm-provider

Schemes : HTTP

Tags

- get_alerts_summary : Alert summary.
- sla_event : SLA Event object definition.
- get_sla_event_summary : SLA not met details.
- rule_actions : Action definition.
- monitored_object_host : List of monitored hosts.
- monitor_service : Start/Stop Monitoring a service.
- get_top_n_alerts : Get top-n entities with max/min alerts.
- get_app_metrics : Metrics time series.
- get_perfparams_ts : Query performance parameters.
- get_top_applications : Top applications.
- monitored_object_param : Store parameters associated with monitored_object.

- `get_switch_events` : Gets switch events.
- `get_link_usage` : Link usage.
- `event_action` : RPC to perform set of action on events.
- `rule_matchers` : Match function definition.
- `get_application_perf_params` : Application perf params
- `rules` : Rule definition.
- `monitored_object_service` : List of service objects monitored.
- `alert_status_object` : Alert status object definition.
- `get_sla_event_ts` : 'Retrieve time series' SLA not met info for a site.
- `alert_object` : Alert object definition.
- `monitored_object_type` : List of mandatory tags needed for this object type.
- `process_alert_status` : Processes alert status by clearing or deleting.
- `get_service_metrics` : RPC to get service metrics data.
- `get_perfparams` : Query performance parameters.
- `get_resource_metrics` : RPC to get resource metrics data.
- `monitored_object` : Monitored object definition.
- `create_event` : RPC to create fmpm events.
- `get_events` : RPC to get FMPM events (alert status objects).

Produces

- `application/json`

9.4.2. Resources

Alert_object

Alert object definition.

Add a new `alert_object`

```
POST /fmpm-provider/alert_object
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>alert_object{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>alert_object{id}</code>

HTTP Code	Description	Schema
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_object"
```

Request body

```
{
  "id" : "string",
  "alert_type" : "string",
  "reason" : "string",
  "severity" : "string",
  "category" : "string",
  "source" : "string",
  "sub_system" : "string",
  "object_id" : "string",
  "object_type" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "device" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",
  "operational-status" : "string",
  "attributes" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",

```

```

    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "id" : "string",
  "alert_type" : "string",
  "reason" : "string",
  "severity" : "string",
  "category" : "string",
  "source" : "string",
  "sub_system" : "string",
  "object_id" : "string",
  "object_type" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "device" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",

```

```
"operational-status" : "string",
"attributes" : "<<_csp-fmpm-provider_xsd_any>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Get the alert_object list

```
GET /fmpm-provider/alert_object
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< alert_object > array

Example HTTP request

Request path

```
"/fmpm-provider/alert_object"
```

Example HTTP response

Response 200

```
"array"
```

Get a single alert_object

```
GET /fmpm-provider/alert_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	alert_object{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_object/0"
```

Example HTTP response

Response 200

```
{
```

```

"id" : "string",
"alert_type" : "string",
"reason" : "string",
"severity" : "string",
"category" : "string",
"source" : "string",
"sub_system" : "string",
"object_id" : "string",
"object_type" : "string",
"start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
"device" : "string",
"region" : "string",
"pop" : "string",
"tenant" : "string",
"site" : "string",
"network_service" : "string",
"server" : "string",
"operational-status" : "string",
"attributes" : "<<_csp-fmpm-provider_xsd_any>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"

```

```
}

```

Update alert_object information

```
PUT /fmpm-provider/alert_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	alert_object{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_object/0"
```

Example HTTP response

Response 200

```
{
  "id" : "string",
  "alert_type" : "string",
  "reason" : "string",
  "severity" : "string",
  "category" : "string",
  "source" : "string",
  "sub_system" : "string",
  "object_id" : "string",

```

```

"object_type" : "string",
"start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
"device" : "string",
"region" : "string",
"pop" : "string",
"tenant" : "string",
"site" : "string",
"network_service" : "string",
"server" : "string",
"operational-status" : "string",
"attributes" : "<<_csp-fmpm-provider_xsd_any>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Delete a single alert_object

```
DELETE /fmpm-provider/alert_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_object/0"
```

Alert_status_object

Alert status object definition.

Add a new alert_status_object

```
POST /fmpm-provider/alert_status_object
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		alert_status_object{ id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	alert_status_object{ id}
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_status_object"
```

Request body

```
{
  "id" : "string",
  "alert_type" : "string",
  "reason" : "string",
  "severity" : "string",
  "category" : "string",
  "source" : "string",
  "sub_system" : "string",
  "object_id" : "string",
  "object_type" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "device" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",
  "operational-status" : "string",
  "attributes" : "<<_csp-fmpm-provider_xsd_any>>",
  "counter" : 0,
  "last_update_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,

```

```

    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "id" : "string",
  "alert_type" : "string",
  "reason" : "string",
  "severity" : "string",
  "category" : "string",
  "source" : "string",
  "sub_system" : "string",
  "object_id" : "string",
  "object_type" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "device" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",

```

```
"server" : "string",
"operational-status" : "string",
"attributes" : "<<_csp-fmpm-provider_xsd_any>>",
"counter" : 0,
"last_update_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Get the alert_status_object list

GET /fmpm-provider/alert_status_object

Responses

HTTP Code	Description	Schema
200	Successful operation	< alert_status_object > array

Example HTTP request

Request path

```
"/fmpm-provider/alert_status_object"
```

Example HTTP response

Response 200

```
"array"
```

Get a single alert_status_object

```
GET /fmpm-provider/alert_status_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	alert_status_object{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_status_object/0"
```

Example HTTP response

Response 200

```

{
  "id" : "string",
  "alert_type" : "string",
  "reason" : "string",
  "severity" : "string",
  "category" : "string",
  "source" : "string",
  "sub_system" : "string",
  "object_id" : "string",
  "object_type" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "device" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",
  "operational-status" : "string",
  "attributes" : "<<_csp-fmpm-provider_xsd_any>>",
  "counter" : 0,
  "last_update_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,

```

```
"global-access" : 0,
"share" : [ {
  "tenant" : "string",
  "tenant_access" : 0
} ]
},
"display-name" : "string"
}
```

Update alert_status_object information

```
PUT /fmpm-provider/alert_status_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	alert_status_object{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_status_object/0"
```

Example HTTP response

Response 200

```
{
```

```

"id" : "string",
"alert_type" : "string",
"reason" : "string",
"severity" : "string",
"category" : "string",
"source" : "string",
"sub_system" : "string",
"object_id" : "string",
"object_type" : "string",
"start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
"device" : "string",
"region" : "string",
"pop" : "string",
"tenant" : "string",
"site" : "string",
"network_service" : "string",
"server" : "string",
"operational-status" : "string",
"attributes" : "<<_csp-fmpm-provider_xsd_any>>",
"counter" : 0,
"last_update_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
} ]

```

```

},
  "display-name" : "string"
}

```

Delete a single alert_status_object

```
DELETE /fmpm-provider/alert_status_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/alert_status_object/0"
```

Create_event

RPC to create fmpm events.

Execute create_event RPC

```
POST /fmpm-provider/create_event
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		create_event-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	create_event-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/create_event"
```

Request body

```
{
  "input" : {
    "alert_obj" : {
      "id" : "string",
      "alert_type" : "string",
      "reason" : "string",
      "severity" : "string",
      "category" : "string",
      "source" : "string",
      "sub_system" : "string",
      "object_id" : "string",
      "object_type" : "string",
      "start_time" : 0,
      "device" : "string",
      "region" : "string",
      "pop" : "string",
      "tenant" : "string",
      "site" : "string",
      "network_service" : "string",
      "server" : "string",
      "operational_status" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "alert_uuid" : "string"
  }
}
```

Event_action

RPC to perform set of action on events.

Execute event_action RPC

```
POST /fmpm-provider/event_action
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		event_action-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	event_action-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/event_action"
```

Request body

```
{
  "input" : {
    "ids" : "string",
    "perform-action" : "string",
    "action-param" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "error_message" : "string"
  }
}
```

Get_alerts_summary

Alert summary.

Execute `get_alerts_summary` RPC

```
POST /fmpm-provider/get_alerts_summary
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_alerts_summary-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_alerts_summary-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_alerts_summary"
```

Request body

```
{
  "input" : {
    "tag_name" : "string",
    "tag_value" : "string",
    "time_range" : {
      "start" : 0,
      "end" : 0
    },
    "binsize" : 0,
    "period" : 0
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "alerts" : [ {
      "tag_value" : "string",
      "alertsummary" : {
        "major" : 0,
        "critical" : 0,
        "minor" : 0
      }
    } ]
  }
}
```

Get_app_metrics

Metrics time series.

Execute get_app_metrics RPC

```
POST /fmpm-provider/get_app_metrics
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_app_metrics-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_app_metrics-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_app_metrics"
```

Request body

```

{
  "input" : {
    "tenant" : "string",
    "site" : "string",
    "device" : "string",
    "metric" : "string",
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "bin_interval" : "string",
    "use_collection" : {
      "name" : "string",
      "aggregation" : "string"
    },
    "aggregation" : "string",
    "group_by" : "string",
    "order_by" : {
      "field" : "string",
      "sort" : "string",
      "limit" : 0
    },
    "nested_aggregation" : {
      "outer" : "string",
      "inner" : "string"
    }
  }
}

```

Example HTTP response

Response 200

```

{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "metric" : "string",
    "group_by" : "string",
    "status" : "string"
  }
}

```

Get_application_perf_params

Application perf params

Execute `get_application_perf_params` RPC

POST /fmpm-provider/get_application_perf_params

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_application_perf_params-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_application_perf_params-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_application_perf_params"
```

Request body

```
{
  "input" : {
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "sort_field" : "string",
    "sort_order" : "string",
    "criteria" : "string",
    "limit" : 0
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "criteria" : "string",
    "status" : "string",
    "application_perf_params" : {
      "apps" : {
        "name" : "string",
        "object_type" : "string",
        "throughput" : "string",
        "sessions" : 0,
        "average_sessions_time" : "string",
        "average_sessions_time_raw" : 0,
        "category" : "string",
        "sub_category" : "string"
      }
    }
  }
}

```

Get_events

RPC to get FMPM events (alert status objects).

Execute `get_events` RPC

```
POST /fmpm-provider/get_events
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_events-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_events-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_events"
```

Request body

```
{
  "input" : {
    "filters" : [ {
      "key" : "string",
      "value" : "string"
    } ],
    "group_by" : "string"
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "status" : "string",
    "total_records" : 0,
    "alerts" : [ {
      "group_by" : "string",
      "alert_info" : {
        "id" : "string",
        "alert_type" : "string",
        "reason" : "string",
        "severity" : "string",
        "category" : "string",
        "source" : "string",
        "sub_system" : "string",
        "object_id" : "string",
        "object_type" : "string",
        "start_time" : 0,
        "device" : "string",
        "region" : "string",
        "pop" : "string",
        "tenant" : "string",
        "site" : "string",
        "network_service" : "string",
        "server" : "string",
        "operational_status" : "string",
        "last_update_time" : 0
      }
    } ]
  }
}

```

Get_link_usage

Link usage.

Execute get_link_usage RPC

POST /fmpm-provider/get_link_usage

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_link_usage- input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_link_usage-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_link_usage"
```

Request body

```
{
  "input" : {
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "binsize" : 0,
    "criteria" : "string",
    "group_by" : "string",
    "group_by_count" : 0
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "criteria" : "string",
    "group_by" : "string",
    "status" : "string",
    "link_usage" : "<<_csp-fmpm-provider_getlinkusageoutputlinkusagetype>>"
  }
}
```

Get_perfparams

Query performance parameters.

Execute `get_perfparams` RPC

POST /fmpm-provider/get_perfparams

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_perfparams-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_perfparams-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_perfparams"
```

Request body

```
{
  "input" : {
    "ns_id" : "string",
    "device_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "ns_id" : "string",
    "device_id" : "string",
    "vnf_params" : {
      "host_id" : "string"
    }
  }
}
```

Get_perfparams_ts

Query performance parameters.

Execute get_perfparams_ts RPC

```
POST /fmpm-provider/get_perfparams_ts
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_perfparams_ts-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_perfparams_ts-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_perfparams_ts"
```

Request body


```

{
  "input" : {
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      },
      "group_by" : "string"
    },
    "absolute_time" : {
      "start_time" : 0,
      "end_time" : 0,
      "binsize" : 0
    },
    "relative_time" : {
      "binsize" : 0,
      "period" : "string"
    },
    "sensor_type" : "string",
    "aggr_function" : "string",
    "sensors" : "string",
    "limit" : 0
  }
}

```

Example HTTP response

Response 200

```

{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      },
      "group_by" : "string"
    },
    "status" : "string",
    "perf_params" : "<<_csp-fmpm-provider_getperfparamstsoutputperfparamstype>>"
  }
}

```

Get_resource_metrics

RPC to get resource metrics data.

Execute `get_resource_metrics` RPC

```
POST /fmpm-provider/get_resource_metrics
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_resource_metrics-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_resource_metrics-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_resource_metrics"
```

Request body

```

{
  "input" : {
    "metric_source" : "string",
    "metric" : "string",
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "bin_interval" : "string",
    "use_collection" : {
      "name" : "string",
      "aggregation" : "string"
    },
    "aggregation" : "string",
    "group_by" : "string",
    "order_by" : {
      "field" : "string",
      "sort" : "string",
      "limit" : 0
    },
    "nested_aggregation" : {
      "outer" : "string",
      "inner" : "string"
    }
  }
}

```

Example HTTP response

Response 200

```

{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "metric" : "string",
    "group_by" : "string",
    "status" : "string"
  }
}

```

Get_service_metrics

RPC to get service metrics data.

Execute `get_service_metrics` RPC

POST /fmpm-provider/get_service_metrics

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_service_metrics-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_service_metrics-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_service_metrics"
```

Request body

```
{
  "input" : {
    "tenant" : "string",
    "site" : "string",
    "device" : "string",
    "metric_source" : "string",
    "metric" : "string",
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "bin_interval" : "string",
    "use_collection" : {
      "name" : "string",
      "aggregation" : "string"
    },
    "aggregation" : "string",
    "group_by" : "string",
    "order_by" : {
      "field" : "string",
      "sort" : "string",
      "limit" : 0
    },
    "nested_aggregation" : {
      "outer" : "string",
      "inner" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "metric" : "string",
    "group_by" : "string",
    "status" : "string"
  }
}
```

Get_sla_event_summary

SLA not met details.

Execute `get_sla_event_summary` RPC

POST `/fmpm-provider/get_sla_event_summary`

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_sla_event_summary-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_sla_event_summary-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_sla_event_summary"
```

Request body

```
{
  "input" : {
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "group_by" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "group_by" : "string",
    "status" : "string"
  }
}
```

Get_sla_event_ts

'Retrieve time series' SLA not met info for a site.

Execute `get_sla_event_ts` RPC

```
POST /fmpm-provider/get_sla_event_ts
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_sla_event_ts-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_sla_event_ts-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_sla_event_ts"
```

Request body

```
{
  "input" : {
    "site" : "string",
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "bin_interval" : 0
  }
}
```


Example HTTP response

Response 200

```
{
  "output" : {
    "bin_interval" : 0,
    "status" : "string",
    "site" : "string"
  }
}
```

Get_switch_events

Gets switch events.

Execute get_switch_events RPC

```
POST /fmpm-provider/get_switch_events
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_switch_events-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_switch_events-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_switch_events"
```

Request body

```
{
  "input" : {
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "group_by" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "group_by" : "string",
    "status" : "string",
    "switch_events" : "<<_csp-fmpm-provider_getswitcheventsoutputswitcheventstype>>"
  }
}
```

Get_top_applications

Top applications.

Execute `get_top_applications` RPC

```
POST /fmpm-provider/get_top_applications
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_top_applications-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_top_applications-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_top_applications"
```

Request body

```
{
  "input" : {
    "input_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "time_range" : {
      "start_time" : 0,
      "end_time" : 0
    },
    "period" : "string",
    "criteria" : "string",
    "group_by" : "string",
    "group_by_count" : 0,
    "limit" : 0
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "in_filters" : {
      "filters" : {
        "entity" : "string",
        "entity_id" : "string"
      }
    },
    "group_by" : "string",
    "status" : "string",
    "top_applications" : "<<_csp-fmpm-provider_gettopapplicationsoutputtopapplicationstype>>"
  }
}
```

Get_top_n_alerts

Get top-n entities with max/min alerts.

Execute `get_top_n_alerts` RPC

```
POST /fmpm-provider/get_top_n_alerts
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_top_n_alerts-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_top_n_alerts-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/get_top_n_alerts"
```

Request body

```
{
  "input" : {
    "entity_type" : "string",
    "tag_name" : "string",
    "tag_value" : "string",
    "criteria" : "string",
    "object_id_like" : "string",
    "limit" : 0,
    "period" : 0,
    "time_range" : {
      "start" : 0,
      "end" : 0
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "items" : [ {
      "name" : "string",
      "count_critical" : 0,
      "count_major" : 0,
      "count_minor" : 0
    } ]
  }
}
```

Monitor_service

Start/Stop Monitoring a service.

Execute monitor_service RPC

```
POST /fmpm-provider/monitor_service
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		monitor_service- input	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitor_service-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitor_service"
```

Request body

```
{
  "input" : {
    "service_name" : "string",
    "service_type" : "string",
    "object_id" : "string",
    "action" : "string"
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "status" : "string",
    "service_name" : "string",
    "service_type" : "string",
    "object_id" : "string",
    "action" : "string"
  }
}

```

Monitored_object

Monitored object definition.

Add a new monitored_object

POST /fmpm-provider/monitored_object

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>monitored_object{id}</code> <code>}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>monitored_object{id}</code> <code>}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path


```
"/fmpm-provider/monitored_object"
```

Request body

```

{
  "id" : "string",
  "object_type" : { },
  "image_type" : "string",
  "components" : "string",
  "created_at" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "role" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",
  "host_name" : "string",
  "ip" : "string",
  "configdb_hostrecord_uuid" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "id" : "string",
  "object_type" : { },
  "image_type" : "string",
  "components" : "string",
  "created_at" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "role" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",
  "host_name" : "string",
  "ip" : "string",
  "configdb_hostrecord_uuid" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the monitored_object list

```
GET /fmpm-provider/monitored_object
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< monitored_object > array

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object"
```

Example HTTP response

Response 200

```
"array"
```

Get a single monitored_object

```
GET /fmpm-provider/monitored_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object{id }
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object/0"
```

Example HTTP response

Response 200

```

{
  "id" : "string",
  "object_type" : { },
  "image_type" : "string",
  "components" : "string",
  "created_at" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "role" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",
  "host_name" : "string",
  "ip" : "string",
  "configdb_hostrecord_uuid" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update monitored_object information

```
PUT /fmpm-provider/monitored_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object/0"
```

Example HTTP response

Response 200


```

{
  "id" : "string",
  "object_type" : { },
  "image_type" : "string",
  "components" : "string",
  "created_at" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "role" : "string",
  "region" : "string",
  "pop" : "string",
  "tenant" : "string",
  "site" : "string",
  "network_service" : "string",
  "server" : "string",
  "host_name" : "string",
  "ip" : "string",
  "configdb_hostrecord_uuid" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single monitored_object

```
DELETE /fmpm-provider/monitored_object/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object/0"
```

Monitored_object_host

List of monitored hosts.

Add a new monitored_object_host

```
POST /fmpm-provider/monitored_object_host
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		monitored_object_host{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_host{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_host"
```

Request body

```

{
  "host_name" : "string",
  "object_type" : "string",
  "tags" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "host_name" : "string",
  "object_type" : "string",
  "tags" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the monitored_object_host list

```
GET /fmpm-provider/monitored_object_host
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< monitored_object_host > array

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_host"
```

Example HTTP response

Response 200

```
"array"
```

Get a single monitored_object_host

```
GET /fmpm-provider/monitored_object_host/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_host{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_host/0"
```

Example HTTP response

Response 200

```
{
  "host_name" : "string",
  "object_type" : "string",
  "tags" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update monitored_object_host information

```
PUT /fmpm-provider/monitored_object_host/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_host{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_host/0"
```

Example HTTP response

Response 200


```
{
  "host_name" : "string",
  "object_type" : "string",
  "tags" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single monitored_object_host

```
DELETE /fmpm-provider/monitored_object_host/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_host/0"
```

Monitored_object_param

Store parameters associated with monitored_object.

Add a new monitored_object_param

```
POST /fmpm-provider/monitored_object_param
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		monitored_object_param{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_param{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_param"
```

Request body

```

{
  "tenant" : "string",
  "site" : "string",
  "device" : "string",
  "object_params" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "tenant" : "string",
  "site" : "string",
  "device" : "string",
  "object_params" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the monitored_object_param list

```
GET /fmpm-provider/monitored_object_param
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< monitored_object_param > array

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_param"
```

Example HTTP response

Response 200

```
"array"
```

Get a single monitored_object_param

```
GET /fmpm-provider/monitored_object_param/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_param{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_param/0"
```

Example HTTP response

Response 200

```
{
  "tenant" : "string",
  "site" : "string",
  "device" : "string",
  "object_params" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update monitored_object_param information

```
PUT /fmpm-provider/monitored_object_param/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_param{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_param/0"
```

Example HTTP response

Response 200


```

{
  "tenant" : "string",
  "site" : "string",
  "device" : "string",
  "object_params" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single monitored_object_param

```
DELETE /fmpm-provider/monitored_object_param/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_param/0"
```

Monitored_object_service

List of service objects monitored.

Add a new monitored_object_service

```
POST /fmpm-provider/monitored_object_service
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		monitored_object_service{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_service{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_service"
```

Request body

```

{
  "service_name" : "string",
  "object_type" : "string",
  "attributes" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "service_name" : "string",
  "object_type" : "string",
  "attributes" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the monitored_object_service list

```
GET /fmpm-provider/monitored_object_service
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< monitored_object_service > array

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_service"
```

Example HTTP response

Response 200

```
"array"
```

Get a single monitored_object_service

```
GET /fmpm-provider/monitored_object_service/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_service{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_service/0"
```

Example HTTP response

Response 200

```
{
  "service_name" : "string",
  "object_type" : "string",
  "attributes" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update monitored_object_service information

```
PUT /fmpm-provider/monitored_object_service/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_service{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_service/0"
```

Example HTTP response

Response 200


```
{
  "service_name" : "string",
  "object_type" : "string",
  "attributes" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single monitored_object_service

```
DELETE /fmpm-provider/monitored_object_service/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_service/0"
```

Monitored_object_type

List of mandatory tags needed for this object type.

Add a new monitored_object_type

```
POST /fmpm-provider/monitored_object_type
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		monitored_object_type{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_type{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_type"
```

Request body

```

{
  "object_type" : "string",
  "mandatory_tags" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "object_type" : "string",
  "mandatory_tags" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the monitored_object_type list

```
GET /fmpm-provider/monitored_object_type
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< monitored_object_type > array

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_type"
```

Example HTTP response

Response 200

```
"array"
```

Get a single monitored_object_type

```
GET /fmpm-provider/monitored_object_type/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_type{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_type/0"
```

Example HTTP response

Response 200

```
{
  "object_type" : "string",
  "mandatory_tags" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update monitored_object_type information

```
PUT /fmpm-provider/monitored_object_type/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	monitored_object_type{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_type/0"
```

Example HTTP response

Response 200


```
{
  "object_type" : "string",
  "mandatory_tags" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single monitored_object_type

```
DELETE /fmpm-provider/monitored_object_type/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/monitored_object_type/0"
```

Process_alert_status

Processes alert status by clearing or deleting.

Execute process_alert_status RPC

```
POST /fmpm-provider/process_alert_status
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		process_alert_status-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	process_alert_status-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/process_alert_status"
```

Request body

```
{
  "input" : {
    "object_id" : "string",
    "include_children" : true,
    "action" : "string",
    "reason" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

Rule_actions

Action definition.

Add a new rule_actions

```
POST /fmpm-provider/rule_actions
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		rule_actions{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	rule_actions{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_actions"
```

Request body

```

{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the rule_actions list

```
GET /fmpm-provider/rule_actions
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< rule_actions > array

Example HTTP request

Request path

```
"/fmpm-provider/rule_actions"
```

Example HTTP response

Response 200

```
"array"
```

Get a single rule_actions

```
GET /fmpm-provider/rule_actions/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rule_actions{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_actions/0"
```

Example HTTP response

Response 200

```
{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```


Update rule_actions information

```
PUT /fmpm-provider/rule_actions/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rule_actions{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_actions/0"
```

Example HTTP response

Response 200

```

{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single rule_actions

```
DELETE /fmpm-provider/rule_actions/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_actions/0"
```

Rule_matchers

Match function definition.

Add a new rule_matchers

```
POST /fmpm-provider/rule_matchers
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>rule_matchers{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>rule_matchers{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_matchers"
```

Request body

```

{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the rule_matchers list

```
GET /fmpm-provider/rule_matchers
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< rule_matchers > array

Example HTTP request

Request path

```
"/fmpm-provider/rule_matchers"
```

Example HTTP response

Response 200

```
"array"
```

Get a single rule_matchers

```
GET /fmpm-provider/rule_matchers/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rule_matchers{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_matchers/0"
```

Example HTTP response

Response 200

```
{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```


[Update rule_matchers information](#)

```
PUT /fmpm-provider/rule_matchers/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rule_matchers{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_matchers/0"
```

Example HTTP response

Response 200

```

{
  "text" : "string",
  "function" : {
    "module_path" : "string",
    "module_name" : "string",
    "function" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single rule_matchers

```
DELETE /fmpm-provider/rule_matchers/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rule_matchers/0"
```

Rules

Rule definition.

Add a new rules

```
POST /fmpm-provider/rules
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>rules{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>rules{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rules"
```

Request body

```

{
  "text" : "string",
  "match" : { },
  "actions" : { },
  "priority" : 0,
  "rule_context" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "text" : "string",
  "match" : { },
  "actions" : { },
  "priority" : 0,
  "rule_context" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

[Get the rules list](#)

GET /fmpm-provider/rules

[Responses](#)

HTTP Code	Description	Schema
200	Successful operation	< rules > array

Example HTTP request

Request path

```
"/fmpm-provider/rules"
```

Example HTTP response

Response 200

```
"array"
```

Get a single rules

```
GET /fmpm-provider/rules/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rules{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rules/0"
```

Example HTTP response

Response 200

```
{
  "text" : "string",
  "match" : { },
  "actions" : { },
  "priority" : 0,
  "rule_context" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update rules information

```
PUT /fmpm-provider/rules/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rules{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rules/0"
```

Example HTTP response

Response 200

```

{
  "text" : "string",
  "match" : { },
  "actions" : { },
  "priority" : 0,
  "rule_context" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single rules

```
DELETE /fmpm-provider/rules/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/rules/0"
```

Sla_event

SLA Event object definition.

Add a new sla_event

```
POST /fmpm-provider/sla_event
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		sla_event{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_event{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/sla_event"
```

Request body

```

{
  "tenant" : "string",
  "site" : "string",
  "sla_profile" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "duration" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "end_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "src_link" : "string",
  "dst_link" : "string",
  "metrics" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "tenant" : "string",
  "site" : "string",
  "sla_profile" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "duration" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "end_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "src_link" : "string",
  "dst_link" : "string",
  "metrics" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the `sla_event` list

```
GET /fmpm-provider/sla_event
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< sla_event > array

Example HTTP request

Request path

```
"/fmpm-provider/sla_event"
```

Example HTTP response

Response 200

```
"array"
```

Get a single sla_event

```
GET /fmpm-provider/sla_event/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_event{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/sla_event/0"
```

Example HTTP response

Response 200


```

{
  "tenant" : "string",
  "site" : "string",
  "sla_profile" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "duration" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "end_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "src_link" : "string",
  "dst_link" : "string",
  "metrics" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update sla_event information

PUT /fmpm-provider/sla_event/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_event{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/sla_event/0"
```

Example HTTP response

Response 200

```

{
  "tenant" : "string",
  "site" : "string",
  "sla_profile" : "string",
  "start_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "duration" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "end_time" : "<<_csp-fmpm-provider_xsd_unsignedlong>>",
  "src_link" : "string",
  "dst_link" : "string",
  "metrics" : "<<_csp-fmpm-provider_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single sla_event

```
DELETE /fmpm-provider/sla_event/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/fmpm-provider/sla_event/0"
```

9.4.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

AlertDistType

Name	Description	Schema
critical <i>optional</i>	Example : 0	integer(int32)
major <i>optional</i>	Example : 0	integer(int32)
minor <i>optional</i>	Example : 0	integer(int32)

AlertsAlertInfoType

Name	Description	Schema
alert_type <i>optional</i>	Allowed values–Host, Service. Example : "string"	string
category <i>optional</i>	One of–alarm or alert. Example : "string"	string
device <i>optional</i>	Object ID of the device with which this alert is associated. Example : "string"	string
id <i>optional</i>	Alert ID. Example : "string"	string
last_update_time <i>optional</i>	Last updated timestamp. Example : 0	integer(int64)
network_service <i>optional</i>	Network Service ID. Example : "string"	string
object_id <i>optional</i>	Host or service ID. Example : "string"	string
object_type <i>optional</i>	Allowed values–UCPE_DEVICE, CPE_DEVICE, UCPE_VNF, VCPE_VNF. Example : "string"	string
operational_status <i>optional</i>	Alert operational status, such as Open/Acknowledged/Fixed/Closed. Example : "string"	string
pop <i>optional</i>	Pop ID. Example : "string"	string
reason <i>optional</i>	Reason for alert. Example : "string"	string
region <i>optional</i>	Region ID. Example : "string"	string
server <i>optional</i>	Server ID–ucpe-device-id if applicable. Example : "string"	string
severity <i>optional</i>	Allowed values - major, minor, critical, normal, info, event. Example : "string"	string
site <i>optional</i>	Site ID. Example : "string"	string
source <i>optional</i>	Service that is raising event–security, device, routing (routing-management, sla-management). Example : "string"	string

Name	Description	Schema
start_time <i>optional</i>	Timestamp of when alert is raised. Example : 0	integer(int64)
sub_system <i>optional</i>	Allowed values - CSO, SD. Example : "string"	string
tenant <i>optional</i>	Tenant ID. Example : "string"	string

AppPerfGroupType

Name	Description	Schema
average_sessions_time <i>optional</i>	Example : "string"	string
average_sessions_time_raw <i>optional</i>	Example : 0	integer(int32)
category <i>optional</i>	Example : "string"	string
name <i>optional</i>	Example : "string"	string
object_type <i>optional</i>	Example : "string"	string
sessions <i>optional</i>	Example : 0	integer(int32)
sub_category <i>optional</i>	Example : "string"	string
throughput <i>optional</i>	Example : "string"	string

CreateEventInputAlertObjType

Name	Description	Schema
alert_type <i>optional</i>	Allowed values–Host, Service. Example : "string"	string
category <i>optional</i>	One of–alarm or alert. Example : "string"	string
device <i>optional</i>	Object ID of the device with which this alert is associated. Example : "string"	string
id <i>optional</i>	Alert ID. Example : "string"	string
network_service <i>optional</i>	Network Service ID. Example : "string"	string
object_id <i>optional</i>	Host or service ID. Example : "string"	string
object_type <i>optional</i>	Allowed values–UCPE_DEVICE, CPE_DEVICE, UCPE_VNF, VCPE_VNF. Example : "string"	string

Name	Description	Schema
operational_status <i>optional</i>	Alert operational status, such as Open/Acknowledged/Fixed/Closed. Example : "string"	string
pop <i>optional</i>	Pop ID. Example : "string"	string
reason <i>optional</i>	Reason for alert. Example : "string"	string
region <i>optional</i>	Region ID. Example : "string"	string
server <i>optional</i>	Server ID—ucpe-device-id if applicable. Example : "string"	string
severity <i>optional</i>	Allowed values - major, minor, critical, normal, info, event. Example : "string"	string
site <i>optional</i>	Site ID. Example : "string"	string
source <i>optional</i>	Service that is raising event—security, device, routing (routing-management, sla-management). Example : "string"	string
start_time <i>optional</i>	Timestamp of when alert is raised. Example : 0	integer(int64)
sub_system <i>optional</i>	Allowed values - CSO, SD. Example : "string"	string
tenant <i>optional</i>	Tenant ID. Example : "string"	string

CreateEvent_InputType

Name	Description	Schema
alert_obj <i>optional</i>	Example : "CreateEventInputAlertObjType"	CreateEventInputAlertObjType

CreateEvent_OutputType

Name	Description	Schema
alert_uuid <i>optional</i>	UUID of the alert object created. Example : "string"	string
status <i>required</i>	Status of create_fmpm_event RPC (SUCCESS/FAILURE). Example : "string"	enum (SUCCESS, FAILURE)

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

EventAction_InputType

Name	Description	Schema
action-param <i>optional</i>	Any additional field related to action can be passed using action-param. Example : "string"	string
ids <i>optional</i>	Event Ids Example : "string"	string
perform-action <i>optional</i>	Action on events—delete, change-status, change-severity. Example : "string"	string

EventAction_OutputType

Name	Description	Schema
error_message <i>optional</i>	Error message. Example : "string"	string
status <i>required</i>	Status of event action RPC, (SUCCESS/FAILURE). Example : "string"	string

FmpmObjectType

Object Type—ucpe_device, ucpe_vnf, ipsec_link, vcpe_vnf, hub.

Type : string

GetAlertsSummaryInputTimeRangeType

Name	Description	Schema
end <i>optional</i>	End time for range in seconds, since epoch, in UTC. Example : 0	integer(int32)
start <i>optional</i>	Start time for range in seconds, since epoch, in UTC. Example : 0	integer(int32)

GetAlertsSummaryOutputAlertsType

Name	Description	Schema
alertsummary <i>optional</i>	Example : "AlertDistType"	AlertDistType
tag_value <i>optional</i>	ID associated with the tag. Example : "string"	string

GetAlertsSummary_InputType

Name	Description	Schema
binsize <i>optional</i>	Allowed time duration in Hours. Example : 0	integer(int32)
period <i>optional</i>	Time duration in Hours. Example : 0	integer(int32)
tag_name <i>optional</i>	Tag-region, pop, site, tenant. Example : "string"	string
tag_value <i>optional</i>	ID list associated with the tag. Example : "string"	string
time_range <i>optional</i>	Example : "GetAlertsSummaryInputTimeRangeType"	GetAlertsSummaryInputTimeRangeType

[GetAlertsSummary_OutputType](#)

Name	Description	Schema
alerts <i>optional</i>	Example : ["GetAlertsSummaryOutputAlertsType"]	< GetAlertsSummaryOutputAlertsType > array
status <i>optional</i>	Status of get_alerts_summary RPC. Example : "string"	enum (SUCCESS, FAILURE)

[GetAppMetricsInputInputFiltersType](#)

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

[GetAppMetricsInputNestedAggregationType](#)

Name	Description	Schema
inner <i>optional</i>	Inner (binsize) interval for the nested-aggregation. Example : "string"	string
outer <i>optional</i>	Outer (overall) time for the nested-aggregation. Example : "string"	string

[GetAppMetricsInputOrderByType](#)

Name	Description	Schema
field <i>optional</i>	Field used for sorting. Allowed values: metric, timestamp and values used in aggregation (sum, count, avg, min & max). Example : "string"	string
limit <i>optional</i>	Number of records returned. Default is all records. Default : 1000 Example : 0	integer(int32)
sort <i>optional</i>	Sorting Order. Allowed values: asc, desc. Default is desc. Example : "string"	string

[GetAppMetricsInputTimeRangeType](#)

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : 0	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : 0	integer(int64)

GetAppMetricsInputUseCollectionType

Name	Description	Schema
aggregation <i>optional</i>	Allowed values: sum, avg. Example : "string"	string
name <i>optional</i>	Allowed values: link, sla, user. Example : "string"	string

GetAppMetricsOutputInFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

GetAppMetrics_InputType

Name	Description	Schema
aggregation <i>optional</i>	The list of possible values—avg, min, max, sum, count. Example : "string"	string
bin_interval <i>optional</i>	Specifies the distribution interval of aggregated data. Example : "string"	string
device <i>optional</i>	Optional: device UUID (Needed only when a site has multiple devices). Example : "string"	string
group_by <i>optional</i>	Optional: The list of entity - entity_id pairs. Possible Filters - For RPM_* metrics: [LINK]. For APPTRACK_* metrics: [APP, APP_GROUP, APP_N_APPGROUP, SLA_PROFILE, LINK]. Example : "string"	string
input_filters <i>optional</i>	Example : "GetAppMetricsInputInputFiltersType"	GetAppMetricsInputInputFiltersType
metric <i>optional</i>	List of metrics. Allowed values: RPM_LATENCY, RPM_JITTER, RPM_PACKET_LOSS, RPM_RTT, RPM_THROUGHPUT, APPTRACK_SESSIONS, APPTRACK_THROUGHPUT. Example : "string"	string
nested_aggregation <i>optional</i>	Example : "GetAppMetricsInputNestedAggregationType"	GetAppMetricsInputNestedAggregationType
order_by <i>optional</i>	Example : "GetAppMetricsInputOrderByType"	GetAppMetricsInputOrderByType
period <i>optional</i>	Optional: Time period in hour, min and second intervals as indicated by h, m or s as suffix. Example : "string"	string
site <i>required</i>	Mandatory: site UUID. Example : "string"	string

Name	Description	Schema
tenant <i>required</i>	Mandatory: tenant UUID. Example : <code>"string"</code>	string
time_range <i>optional</i>	Example : <code>"GetAppMetricsInputTimeRangeType"</code>	GetAppMetricsInputTimeRangeType
use_collection <i>optional</i>	Example : <code>"GetAppMetricsInputUseCollectionType"</code>	GetAppMetricsInputUseCollectionType

[GetAppMetrics_OutputType](#)

Name	Description	Schema
group_by <i>optional</i>	Criteria which to group entities. Example : <code>"string"</code>	string
in_filters <i>optional</i>	Example : <code>"GetAppMetricsOutputInFiltersType"</code>	GetAppMetricsOutputInFiltersType
metric <i>optional</i>	Metric name. Example : <code>"string"</code>	string
status <i>optional</i>	Result of RPC call—success or failure. Example : <code>"string"</code>	string

[GetApplicationPerfParamsInputInputFiltersType](#)

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

[GetApplicationPerfParamsInputTimeRangeType](#)

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : <code>0</code>	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : <code>0</code>	integer(int64)

[GetApplicationPerfParamsOutputApplicationPerfParamsType](#)

Name	Description	Schema
apps <i>optional</i>	Example : <code>"AppPerfGroupType"</code>	AppPerfGroupType

[GetApplicationPerfParamsOutputInFiltersType](#)

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

[GetApplicationPerfParams_InputType](#)

Name	Description	Schema
criteria <i>optional</i>	Criteria on which to get perf params–APP_GROUP, APPLICATION Example : "string"	string
input_filters <i>optional</i>	Example : "GetApplicationPerfParamsInputInputFiltersType"	GetApplicationPerfParamsInputInputFiltersType
limit <i>optional</i>	Optional: Number of applications to return. Default : 1000 Example : 0	integer(int32)
period <i>optional</i>	Optional: Time period in hour, min and second intervals indicated by h, m or s as suffix. Example : "string"	string
sort_field <i>optional</i>	Field on which to sort–NAME, THROUGHPUT, SESSIONS, AVG_SESSION_TIME. Example : "string"	string
sort_order <i>optional</i>	Ascending or descending sort order (ASC or DESC). Example : "string"	string
time_range <i>optional</i>	Example : "GetApplicationPerfParamsInputTimeRangeType"	GetApplicationPerfParamsInputTimeRangeType

GetApplicationPerfParams_OutputType

Name	Description	Schema
application_perf_params <i>optional</i>	Example : "GetApplicationPerfParamsOutputApplicationPerfParamsType"	GetApplicationPerfParamsOutputApplicationPerfParamsType
criteria <i>optional</i>	Input criteria specified. Example : "string"	string
in_filters <i>optional</i>	Example : "GetApplicationPerfParamsOutputInFiltersType"	GetApplicationPerfParamsOutputInFiltersType
status <i>optional</i>	Result of RPC call–success or failure Example : "string"	string

GetEventsInputFiltersType

Name	Description	Schema
key <i>optional</i>	Name of filter param (any of the alert attributes except ID), if key is given, value is mandatory. Example : "string"	string
value <i>optional</i>	Value of filter param. Example : "string"	string

GetEventsOutputAlertsType

Name	Description	Schema
alert_info <i>optional</i>	Example : "AlertsAlertInfoType"	AlertsAlertInfoType

Name	Description	Schema
group_by <i>optional</i>	Group by field specified in the RPC input. null if not specified any in input. Example : <code>"string"</code>	string

GetEvents_InputType

Name	Description	Schema
filters <i>optional</i>	Example : [<code>"GetEventsInputFiltersType"</code>]	< GetEventsInputFiltersType > array
group_by <i>optional</i>	Group by field (Allowed group - severity, tenant, alert_type, source). Example : <code>"string"</code>	string

GetEvents_OutputType

Name	Description	Schema
alerts <i>optional</i>	Example : [<code>"GetEventsOutputAlertsType"</code>]	< GetEventsOutputAlertsType > array
status <i>required</i>	Status of get_fmfm_event RPC (SUCCESS/FAILURE). Example : <code>"string"</code>	enum (SUCCESS, FAILURE)
total_records <i>required</i>	Total number of records. Example : <code>0</code>	integer(int32)

GetLinkUsageInputInputFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

GetLinkUsageInputTimeRangeType

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : <code>0</code>	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : <code>0</code>	integer(int64)

GetLinkUsageOutputInFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

GetLinkUsage_InputType

Name	Description	Schema
binsize <i>optional</i>	Binsize specifies the distribution interval in seconds. Example : 0	integer(int32)
criteria <i>optional</i>	Criteria on which to compute the usage like THROUGHPUT. Example : "string"	string
group_by <i>required</i>	Criteria by which to group—APPLICATION, APP_GROUP, APP_CATEGORY. Example : "string"	string
group_by_count <i>optional</i>	Specifies the number of groups indicated by the group_by entity. Default : 5 Example : 0	integer(int32)
input_filters <i>optional</i>	Example : "GetLinkUsageInputInputFiltersType"	GetLinkUsageInputInputFiltersType
period <i>optional</i>	Optional: Time period in hours, min and seconds indicated by h, m or s as suffix. Example : "string"	string
time_range <i>optional</i>	Example : "GetLinkUsageInputTimeRangeType"	GetLinkUsageInputTimeRangeType

GetLinkUsage_OutputType

Name	Description	Schema
criteria <i>optional</i>	Criteria on which the usage is computed. Example : "string"	string
group_by <i>optional</i>	The criteria by which to group entities. Example : "string"	string
in_filters <i>optional</i>	Example : "GetLinkUsageOutputInFiltersType"	GetLinkUsageOutputInFiltersType
link_usage <i>optional</i>	Example : "[_csp-fmpm-provider_getlinkusageoutputlinkusagetype]"	GetLinkUsageOutputLinkUsageType
status <i>optional</i>	Result of the RPC call—success or failure. Example : "string"	string

GetPerfparamsOutputVnfParamsType

Name	Description	Schema
host_id <i>optional</i>	Host ID. Example : "string"	string

GetPerfparamsTsInputAbsoluteTimeType

Name	Description	Schema
binsize <i>optional</i>	Specifies the distribution interval in seconds. Example : 0	integer(int32)
end_time <i>optional</i>	End time, in microseconds since epoch. Example : 0	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : 0	integer(int64)

GetPerfparamsTsInputInputFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InputFiltersFiltersType"	InputFiltersFiltersType
group_by <i>optional</i>	Entity name on which to group the results. Example : "string"	string

GetPerfparamsTsInputRelativeTimeType

Name	Description	Schema
binsize <i>optional</i>	Specifies the distribution interval in seconds. Example : 0	integer(int32)
period <i>optional</i>	Time period nn hour, min and second, indicated by h, m or s as suffix. Example : "string"	string

GetPerfparamsTsOutputInFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersFiltersType"	InFiltersFiltersType
group_by <i>optional</i>	Entity name on which to group the results. Example : "string"	string

GetPerfparamsTs_InputType

Name	Description	Schema
absolute_time <i>optional</i>	Example : "GetPerfparamsTsInputAbsoluteTimeType"	GetPerfparamsTsInputAbsoluteTimeType
aggr_function <i>optional</i>	Aggregate function to aggregate the query results. Example : "string"	string
input_filters <i>optional</i>	Example : "GetPerfparamsTsInputInputFiltersType"	GetPerfparamsTsInputInputFiltersType
limit <i>optional</i>	Max number of records to return. Default : 1000 Example : 0	integer(int32)
relative_time <i>optional</i>	Example : "GetPerfparamsTsInputRelativeTimeType"	GetPerfparamsTsInputRelativeTimeType
sensor_type <i>required</i>	Sensor type on which to query metrics. Example : "string"	string
sensors <i>optional</i>	List of metric names or sensor names. Example : "string"	string

GetPerfparamsTs_OutputType

Name	Description	Schema
in_filters <i>optional</i>	Example : "GetPerfparamsTsOutputInFiltersType"	GetPerfparamsTsOutputInFiltersType

Name	Description	Schema
perf_params <i>optional</i>	Example : "[_csp-fmpm-provider_getperfparamstsoutputperfparamstype] "	GetPerfparamsTsOutputPerfParamsType
status <i>optional</i>	Request status–success or failed. Example : "string"	string

[GetPerfparams_InputType](#)

Name	Description	Schema
device_id <i>optional</i>	Device ID. Example : "string"	string
ns_id <i>optional</i>	Network service ID. Example : "string"	string

[GetPerfparams_OutputType](#)

Name	Description	Schema
device_id <i>optional</i>	Device ID Example : "string"	string
ns_id <i>optional</i>	Network Service ID. Example : "string"	string
status <i>optional</i>	Status of get_perfparams RPC. Example : "string"	string
vnf_params <i>optional</i>	Example : "GetPerfparamsOutputVnfParamsType"	GetPerfparamsOutputVnfParamsType

[GetResourceMetricsInputInputFiltersType](#)

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

[GetResourceMetricsInputNestedAggregationType](#)

Name	Description	Schema
inner <i>optional</i>	Inner (binsize) interval for the nested-aggregation. Example : "string"	string
outer <i>optional</i>	Outer (overall) time for the nested-aggregation. Example : "string"	string

[GetResourceMetricsInputOrderByType](#)

Name	Description	Schema
field <i>optional</i>	Field used for sorting. Allowed values: metric, timestamp and values used in aggregation (sum, count, avg, min & max). Example : "string"	string
limit <i>optional</i>	Number of records returned. Default is all records. Default : 1000 Example : 0	integer(int32)

Name	Description	Schema
sort <i>optional</i>	Sorting Order. Allowed values: asc, desc. Default is desc. Example : <code>"string"</code>	string

GetResourceMetricsInputTimeRangeType

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : <code>0</code>	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : <code>0</code>	integer(int64)

GetResourceMetricsInputUseCollectionType

Name	Description	Schema
aggregation <i>optional</i>	Allowed values: sum, avg. Example : <code>"string"</code>	string
name <i>optional</i>	Allowed values: link, sla, user. Example : <code>"string"</code>	string

GetResourceMetricsOutputInFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

GetResourceMetrics_InputType

Name	Description	Schema
aggregation <i>optional</i>	The list of possible values - avg, min, max, sum, count Example : <code>"string"</code>	string
bin_interval <i>optional</i>	Specifies the distribution interval of aggregated data. Example : <code>"string"</code>	string
group_by <i>optional</i>	Optional: Allowed Values - [POP, TENANT, VIM, RESOURCE_POOL]. Example : <code>"string"</code>	string
input_filters <i>optional</i>	Example : <code>"GetResourceMetricsInputInputFiltersType"</code>	GetResourceMetricsInputInputFiltersType
metric <i>optional</i>	List of metrics. Example : <code>"string"</code>	string
metric_source <i>required</i>	Mandatory: Allowed Values - [POP, TENANT]. Example : <code>"string"</code>	string
nested_aggregation <i>optional</i>	Example : <code>"GetResourceMetricsInputNestedAggregationType"</code>	GetResourceMetricsInputNestedAggregationType
order_by <i>optional</i>	Example : <code>"GetResourceMetricsInputOrderByType"</code>	GetResourceMetricsInputOrderByType

Name	Description	Schema
period <i>optional</i>	Optional: Time period in hour, min and second intervals as indicated by h, m or s as suffix Example : <code>"string"</code>	string
time_range <i>optional</i>	Example : <code>"GetResourceMetricsInputTimeRangeType"</code>	GetResourceMetricsInputTimeRangeType
use_collection <i>optional</i>	Example : <code>"GetResourceMetricsInputUseCollectionType"</code>	GetResourceMetricsInputUseCollectionType

[GetResourceMetrics_OutputType](#)

Name	Description	Schema
group_by <i>optional</i>	Criteria by which to group. Example : <code>"string"</code>	string
in_filters <i>optional</i>	Example : <code>"GetResourceMetricsOutputInFiltersType"</code>	GetResourceMetricsOutputInFiltersType
metric <i>optional</i>	Metric name. Example : <code>"string"</code>	string
status <i>optional</i>	Result of the RPC call—success or failure. Example : <code>"string"</code>	string

[GetServiceMetricsInputInputFiltersType](#)

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

[GetServiceMetricsInputNestedAggregationType](#)

Name	Description	Schema
inner <i>optional</i>	Inner (binsize) interval for the nested-aggregation. Example : <code>"string"</code>	string
outer <i>optional</i>	Outer (overall) time for the nested-aggregation. Example : <code>"string"</code>	string

[GetServiceMetricsInputOrderByType](#)

Name	Description	Schema
field <i>optional</i>	Field used for sorting. Allowed values: metric, timestamp and values used in aggregation (sum, count, avg, min & max). Example : <code>"string"</code>	string
limit <i>optional</i>	Number of records returned. Default is all records. Default : <code>1000</code> Example : <code>0</code>	integer(int32)
sort <i>optional</i>	Sorting Order. Allowed values: asc, desc. Default is desc. Example : <code>"string"</code>	string

[GetServiceMetricsInputTimeRangeType](#)

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : 0	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : 0	integer(int64)

GetServiceMetricsInputUseCollectionType

Name	Description	Schema
aggregation <i>optional</i>	Allowed values: sum, avg. Example : "string"	string
name <i>optional</i>	Allowed values: link, sla, user. Example : "string"	string

GetServiceMetricsOutputInFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

GetServiceMetrics_InputType

Name	Description	Schema
aggregation <i>optional</i>	List of possible values—avg, min, max, sum, count. Example : "string"	string
bin_interval <i>optional</i>	Specifies the distribution interval of aggregated data. Example : "string"	string
device <i>optional</i>	Optional: device UUID (Needed only when a site has multiple devices). Example : "string"	string
group_by <i>optional</i>	Optional: Allowed Values - [DEVICE, NS_ID, VNF_TYPE, VNF_ID, COMPONENT]. Example : "string"	string
input_filters <i>optional</i>	Example : "GetServiceMetricsInputInputFiltersType"	GetServiceMetricsInputInputFiltersType
metric <i>optional</i>	List of metrics. Example : "string"	string
metric_source <i>required</i>	Mandatory: Allowed Values - [VNF, UCPE, CPE]. Example : "string"	string
nested_aggregation <i>optional</i>	Example : "GetServiceMetricsInputNestedAggregationType"	GetServiceMetricsInputNestedAggregationType
order_by <i>optional</i>	Example : "GetServiceMetricsInputOrderByType"	GetServiceMetricsInputOrderByType
period <i>optional</i>	Optional: Time period in hour, min and second intervals as indicated by h, m or s as suffix. Example : "string"	string
site <i>required</i>	Mandatory: site UUID. Example : "string"	string

Name	Description	Schema
tenant <i>required</i>	Mandatory: tenant UUID. Example : <code>"string"</code>	string
time_range <i>optional</i>	Example : <code>"GetServiceMetricsInputTimeRangeType"</code>	GetServiceMetricsInputTimeRangeType
use_collection <i>optional</i>	Example : <code>"GetServiceMetricsInputUseCollectionType"</code>	GetServiceMetricsInputUseCollectionType

[GetServiceMetrics_OutputType](#)

Name	Description	Schema
group_by <i>optional</i>	Criteria by which to group. Example : <code>"string"</code>	string
in_filters <i>optional</i>	Example : <code>"GetServiceMetricsOutputInFiltersType"</code>	GetServiceMetricsOutputInFiltersType
metric <i>optional</i>	The metric name. Example : <code>"string"</code>	string
status <i>optional</i>	Result of the RPC call—success or failure. Example : <code>"string"</code>	string

[GetSlaEventSummaryInputInputFiltersType](#)

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

[GetSlaEventSummaryInputTimeRangeType](#)

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : <code>0</code>	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : <code>0</code>	integer(int64)

[GetSlaEventSummaryOutputInFiltersType](#)

Name	Description	Schema
filters <i>optional</i>	Example : <code>"InFiltersGroupType"</code>	InFiltersGroupType

[GetSlaEventSummary_InputType](#)

Name	Description	Schema
group_by <i>optional</i>	Field by which to group—TENANT, LOCATION. Example : <code>"string"</code>	string
input_filters <i>optional</i>	Example : <code>"GetSlaEventSummaryInputInputFiltersType"</code>	GetSlaEventSummaryInputInputFiltersType

Name	Description	Schema
period <i>optional</i>	Optional: Time period in hour, min and second intervals as denoted by h, m or s as suffix. Example : "string"	string
time_range <i>optional</i>	Example : "GetSlaEventSummaryInputTimeRangeType"	GetSlaEventSummaryInputTimeRangeType

[GetSlaEventSummary_OutputType](#)

Name	Description	Schema
group_by <i>optional</i>	Criteria by which to group. Example : "string"	string
in_filters <i>optional</i>	Example : "GetSlaEventSummaryOutputInFiltersType"	GetSlaEventSummaryOutputInFiltersType
status <i>optional</i>	Result of the RPC call—success or failure. Example : "string"	string

[GetSlaEventTsInputTimeRangeType](#)

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : 0	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : 0	integer(int64)

[GetSlaEventTs_InputType](#)

Name	Description	Schema
bin_interval <i>optional</i>	bin_interval specifies the distribution interval in Seconds. Example : 0	integer(int32)
period <i>optional</i>	Optional: Time period in hour, min and second intervals as denoted by h, m or s as suffix. Example : "string"	string
site <i>optional</i>	Site ID. Example : "string"	string
time_range <i>optional</i>	Example : "GetSlaEventTsInputTimeRangeType"	GetSlaEventTsInputTimeRangeType

[GetSlaEventTs_OutputType](#)

Name	Description	Schema
bin_interval <i>optional</i>	Specifies the distribution interval in seconds. Example : 0	integer(int32)
site <i>optional</i>	Site ID. Example : "string"	string
status <i>optional</i>	The result of the rpc call - success or failure. Example : "string"	string

GetSwitchEventsInputInputFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

GetSwitchEventsInputTimeRangeType

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : 0	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : 0	integer(int64)

GetSwitchEventsOutputInFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

GetSwitchEvents_InputType

Name	Description	Schema
group_by <i>optional</i>	Field by which to group—TENANT, LOCATION. Example : "string"	string
input_filters <i>optional</i>	Example : "GetSwitchEventsInputInputFiltersType"	GetSwitchEventsInputInputFiltersType
period <i>optional</i>	Optional: Time period in hour, min and second intervals indicated by h, m or s as suffix Example : "string"	string
time_range <i>optional</i>	Example : "GetSwitchEventsInputTimeRangeType"	GetSwitchEventsInputTimeRangeType

GetSwitchEvents_OutputType

Name	Description	Schema
group_by <i>optional</i>	Criteria by which to group. Example : "string"	string
in_filters <i>optional</i>	Example : "GetSwitchEventsOutputInFiltersType"	GetSwitchEventsOutputInFiltersType
status <i>optional</i>	Result of RPC call—success or failure. Example : "string"	string
switch_events <i>optional</i>	Example : "[_csp-fmpm-provider_getswitcheventsoutputswitcheventstype]"	GetSwitchEventsOutputSwitchEventsType

GetTopApplicationsInputInputFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

GetTopApplicationsInputTimeRangeType

Name	Description	Schema
end_time <i>optional</i>	End time, in microseconds since epoch. Example : 0	integer(int64)
start_time <i>optional</i>	Start time, in microseconds since epoch. Example : 0	integer(int64)

GetTopApplicationsOutputInFiltersType

Name	Description	Schema
filters <i>optional</i>	Example : "InFiltersGroupType"	InFiltersGroupType

GetTopApplications_InputType

Name	Description	Schema
criteria <i>required</i>	The criteria to query on - THROUGHPUT, SESSIONS, SESSION_DURATION etc. Example : "string"	string
group_by <i>optional</i>	The criteria to group by - LINK, LOCATION. Example : "string"	string
group_by_count <i>optional</i>	Specifies the number of groups indicated by the group_by entity. Default : 5 Example : 0	integer(int32)
input_filters <i>optional</i>	Example : "GetTopApplicationsInputInputFiltersType"	GetTopApplicationsInputInputFiltersType
limit <i>optional</i>	Number of applications to return. Default : 1000 Example : 0	integer(int32)
period <i>optional</i>	Optional: Time period In Hour, Min and Second denoted by h, m or s as suffix. Example : "string"	string
time_range <i>optional</i>	Example : "GetTopApplicationsInputTimeRangeType"	GetTopApplicationsInputTimeRangeType

GetTopApplications_OutputType

Name	Description	Schema
group_by <i>optional</i>	Criteria by which to group. Example : "string"	string
in_filters <i>optional</i>	Example : "GetTopApplicationsOutputInFiltersType"	GetTopApplicationsOutputInFiltersType
status <i>optional</i>	Result of the RPC call—success or failure. Example : "string"	string
top_applications <i>optional</i>	Example : "[_csp-fmpm-provider_gettopapplicationsoutputtopapplicationstype]"	GetTopApplicationsOutputTopApplicationsType

GetTopNAAlerts_InputType

Name	Description	Schema
criteria <i>optional</i>	Criteria—min, max. Example : <code>"string"</code>	string
entity_type <i>optional</i>	Type—region, pop, site, tenant. Example : <code>"string"</code>	string
limit <i>optional</i>	Number of records requested. Default : 1000 Example : 0	integer(int32)
object_id_like <i>optional</i>	Partial value to match the object_id field. Example : <code>"string"</code>	string
period <i>optional</i>	Time duration in hours. Example : 0	integer(int32)
tag_name <i>optional</i>	Tag—region, pop, site, tenant. Example : <code>"string"</code>	string
tag_value <i>optional</i>	ID associated with the tag. Example : <code>"string"</code>	string
time_range <i>optional</i>	Example : <code>"GetTopnAlertsInputTimeRangeType"</code>	GetTopnAlertsInputTimeRangeType

GetTopNAAlerts_OutputType

Name	Description	Schema
items <i>optional</i>	Example : [<code>"GetTopnAlertsOutputItemsType"</code>]	< GetTopnAlertsOutputItemsType > array
status <i>optional</i>	Status of get_top_n_alerts RPC. Example : <code>"string"</code>	enum (SUCCESS, FAILURE)

GetTopnAlertsInputTimeRangeType

Name	Description	Schema
end <i>optional</i>	End time for range in seconds, since epoch, in UTC. Example : 0	integer(int32)
start <i>optional</i>	Start time for range in seconds, since epoch, in UTC. Example : 0	integer(int32)

GetTopnAlertsOutputItemsType

Name	Description	Schema
count_critical <i>optional</i>	Count of critical alerts. Example : 0	integer(int32)
count_major <i>optional</i>	Count of major alerts. Example : 0	integer(int32)
count_minor <i>optional</i>	Count of minor alerts. Example : 0	integer(int32)
name <i>optional</i>	Entity name. Example : <code>"string"</code>	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

InFiltersFiltersType

Name	Description	Schema
entity <i>optional</i>	Entity name for location, tenant, device, ns, pop, and others. Example : "string"	string
entity_id <i>optional</i>	List of entity-id values. Example : "string"	string

InFiltersGroupType

Name	Description	Schema
entity <i>optional</i>	Example : "string"	string
entity_id <i>optional</i>	Example : "string"	string

InputFiltersFiltersType

Name	Description	Schema
entity <i>optional</i>	Entity name for location, tenant, device, ns, pop, and others. Example : "string"	string
entity_id <i>optional</i>	List of entity-id values. Example : "string"	string

LeafrefType

Rule action function.

Type : string

MonitorServiceBatchInputServicesType

Name	Description	Schema
action <i>optional</i>	Operation to be performed. Example : "string"	enum (ADD, DEL)
object_id <i>optional</i>	Object ID, like site or device UUID. Example : "string"	string
service_name <i>optional</i>	Service name, e.g. ipsec tunnel ID. Example : "string"	string
service_type <i>optional</i>	Service type, as in METRICS. Example : "string"	string

MonitorServiceBatchOutputStatusType

Name	Description	Schema
action <i>optional</i>	Operation to be performed. Example : "string"	enum (ADD, DEL)
object_id <i>optional</i>	Object id, as in site or device UUID. Example : "string"	string
service_name <i>optional</i>	Service name, as in ipsec tunnel ID Example : "string"	string
service_type <i>optional</i>	Service type, as in METRICS. Example : "string"	string
status <i>optional</i>	Outcome of RPC operation. Example : "string"	enum (SUCCESS, FAILURE)

MonitorServiceBatch_InputType

Name	Description	Schema
services <i>optional</i>	Example : ["MonitorServiceBatchInputServicesType"]	< MonitorServiceBatchInputServicesType > array

MonitorServiceBatch_OutputType

Name	Description	Schema
status <i>optional</i>	Example : ["MonitorServiceBatchOutputStatusType"]	< MonitorServiceBatchOutputStatusType > array

MonitorService_InputType

Name	Description	Schema
action <i>optional</i>	Operation to be performed. Example : "string"	enum (ADD, DEL)
object_id <i>optional</i>	Object ID, like site or device UUID. Example : "string"	string

Name	Description	Schema
service_name <i>optional</i>	Service name, e.g. ipsec tunnel ID. Example : "string"	string
service_type <i>optional</i>	Service type, as in METRICS. Example : "string"	string

MonitorService_OutputType

Name	Description	Schema
action <i>optional</i>	Operation to be performed. Example : "string"	enum (ADD, DEL)
object_id <i>optional</i>	Object id, as in site or device UUID. Example : "string"	string
service_name <i>optional</i>	Service name, as in ipsec tunnel ID Example : "string"	string
service_type <i>optional</i>	Service type, as in METRICS. Example : "string"	string
status <i>optional</i>	Outcome of RPC operation. Example : "string"	enum (SUCCESS, FAILURE)

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
group_access <i>optional</i>	Example : 0	integer(int32)
other_access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner-access <i>optional</i>	Example : 0	integer(int32)
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

ProcessAlertStatus_InputType

Name	Description	Schema
action <i>optional</i>	Action to take on the alert_status. Example : "string"	enum (DELETE, CLEAR)
include_children <i>optional</i>	Include children—true or false. Example : true	boolean
object_id <i>optional</i>	Object ID—vnf_id or ns_id. Example : "string"	string
reason <i>optional</i>	Reason for the action on alert_status. Example : "string"	string

ProcessAlertStatus_OutputType

Name	Description	Schema
status <i>optional</i>	Status of process_alert_status RPC. Example : "string"	enum (SUCCESS, FAILURE)

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string

Name	Description	Schema
rule_object <i>optional</i>	Example : <code>"string"</code>	string
rule_perms <i>optional</i>	Example : <code>"RbacPermType"</code>	<code>RbacPermType</code>

RuleActionsFunctionType

Name	Description	Schema
function <i>optional</i>	Python function name. Example : <code>"string"</code>	string
module_name <i>optional</i>	Python module name. Example : <code>"string"</code>	string
module_path <i>optional</i>	Python module path in the file system. Example : <code>"string"</code>	string

RuleMatchersFunctionType

Name	Description	Schema
function <i>optional</i>	Python function name. Example : <code>"string"</code>	string
module_name <i>optional</i>	Python module name. Example : <code>"string"</code>	string
module_path <i>optional</i>	Python module path in the file system. Example : <code>"string"</code>	string

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : <code>"string"</code>	string
tenant_access <i>optional</i>	Example : <code>0</code>	integer(int32)

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : <code>0</code>	integer(int64)
uuid_mslong <i>optional</i>	Example : <code>0</code>	integer(int64)

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

alert_object

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

alert_object{id}

Name	Description	Schema
alert_type <i>optional</i>	Allowed values–Host, Service. Example : "string"	string
attributes <i>optional</i>	Opaque context specific data. Example : "[_csp-fmpm-provider_xsd_any]"	xsd:any
category <i>optional</i>	One of–alarm or alert. Example : "string"	string
device <i>optional</i>	Object ID of the device with which this alert is associated. Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id <i>optional</i>	Alert ID. Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
network_service <i>optional</i>	Network Service ID. Example : "string"	string
object_id <i>optional</i>	Host or service ID. Example : "string"	string
object_type <i>optional</i>	Allowed values–UCPE_DEVICE, CPE_DEVICE, UCPE_VNF, VCPE_VNF. Example : "string"	string
operational-status <i>optional</i>	Alert operational status, such as Open/Acknowledged/Fixed/Closed. Example : "string"	string

Name	Description	Schema
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pop <i>optional</i>	Pop ID. Example : "string"	string
reason <i>optional</i>	Reason for alert. Example : "string"	string
region <i>optional</i>	Region ID. Example : "string"	string
server <i>optional</i>	Server ID—ucpe-device-id if applicable. Example : "string"	string
severity <i>optional</i>	Allowed values - major, minor, critical, normal, info, event. Example : "string"	string
site <i>optional</i>	Site ID. Example : "string"	string
source <i>optional</i>	Service that is raising event—security, device, routing (routing-management, sla-management). Example : "string"	string
start_time <i>optional</i>	Timestamp of when alert is raised. Example : "[_csp-fmpm-provider_xsd_unsignedlong] "	xsd:unsignedLong
sub_system <i>optional</i>	Allowed values - CSO, SD. Example : "string"	string
tenant <i>optional</i>	Tenant ID. Example : "string"	string

alert_status_object

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

alert_status_object{id}

Name	Description	Schema
alert_type <i>optional</i>	Allowed values—Host, Service. Example : "string"	string
attributes <i>optional</i>	Opaque context specific data. Example : "[_csp-fmpm-provider_xsd_any] "	xsd:any
category <i>optional</i>	One of—alarm or alert. Example : "string"	string
counter <i>optional</i>	Alarm recurrence counter. Example : 0	integer(int32)
device <i>optional</i>	Object ID of the device with which this alert is associated. Example : "string"	string
display-name <i>optional</i>	Example : "string"	string

Name	Description	Schema
id <i>optional</i>	Alert ID. Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
last_update_time <i>optional</i>	Last updated timestamp. Example : "[_csp-fmpm-provider_xsd_unsignedlong] "	xsd:unsignedLong
network_service <i>optional</i>	Network Service ID. Example : "string"	string
object_id <i>optional</i>	Host or service ID. Example : "string"	string
object_type <i>optional</i>	Allowed values–UCPE_DEVICE, CPE_DEVICE, UCPE_VNF, VCPE_VNF. Example : "string"	string
operational-status <i>optional</i>	Alert operational status, such as Open/Acknowledged/Fixed/Closed. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pop <i>optional</i>	Pop ID. Example : "string"	string
reason <i>optional</i>	Reason for alert. Example : "string"	string
region <i>optional</i>	Region ID. Example : "string"	string
server <i>optional</i>	Server ID–ucpe-device-id if applicable. Example : "string"	string
severity <i>optional</i>	Allowed values - major, minor, critical, normal, info, event. Example : "string"	string
site <i>optional</i>	Site ID. Example : "string"	string
source <i>optional</i>	Service that is raising event–security, device, routing (routing-management, sla-management). Example : "string"	string
start_time <i>optional</i>	Timestamp of when alert is raised. Example : "[_csp-fmpm-provider_xsd_unsignedlong] "	xsd:unsignedLong
sub_system <i>optional</i>	Allowed values - CSO, SD. Example : "string"	string
tenant <i>optional</i>	Tenant ID. Example : "string"	string

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

`api-access-list{id}`

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : <code>"RbacRuleEntriesType"</code>	RbacRuleEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`config-root`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`config-root{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-fmpm-provider_config-root_id_domain"]</code>	<code>< config-root{id}_domain ></code> array
global-system-config <i>optional</i>	Example : <code>["_csp-fmpm-provider_config-root_id_global-system-config"]</code>	<code>< config-root{id}_global-system-config ></code> array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`create_event-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateEvent_InputType"</code>	CreateEvent_InputType

`create_event-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateEvent_OutputType"</code>	<code>CreateEvent_OutputType</code>

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-fmpm-provider_domain_id_api-access-list"]</code>	<code>< domain{id}_api-access-list > array</code>
display-name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	<code>DomainLimitsType</code>
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>
namespace <i>optional</i>	Example : <code>["_csp-fmpm-provider_domain_id_namespace"]</code>	<code>< domain{id}_namespace > array</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>
project <i>optional</i>	Example : <code>["_csp-fmpm-provider_domain_id_project"]</code>	<code>< domain{id}_project > array</code>

event_action-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"EventAction_InputType"</code>	<code>EventAction_InputType</code>

event_action-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"EventAction_OutputType"</code>	<code>EventAction_OutputType</code>

get_alerts_summary-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetAlertsSummary_InputType"</code>	<code>GetAlertsSummary_InputType</code>

get_alerts_summary-output

Name	Description	Schema
output <i>optional</i>	Example : "GetAlertsSummary_OutputType"	GetAlertsSummary_OutputType

get_app_metrics-input

Name	Description	Schema
input <i>optional</i>	Example : "GetAppMetrics_InputType"	GetAppMetrics_InputType

get_app_metrics-output

Name	Description	Schema
output <i>optional</i>	Example : "GetAppMetrics_OutputType"	GetAppMetrics_OutputType

get_application_perf_params-input

Name	Description	Schema
input <i>optional</i>	Example : "GetApplicationPerfParams_InputType"	GetApplicationPerfParams_InputType

get_application_perf_params-output

Name	Description	Schema
output <i>optional</i>	Example : "GetApplicationPerfParams_OutputType"	GetApplicationPerfParams_OutputType

get_events-input

Name	Description	Schema
input <i>optional</i>	Example : "GetEvents_InputType"	GetEvents_InputType

get_events-output

Name	Description	Schema
output <i>optional</i>	Example : "GetEvents_OutputType"	GetEvents_OutputType

get_link_usage-input

Name	Description	Schema
input <i>optional</i>	Example : "GetLinkUsage_InputType"	GetLinkUsage_InputType

[get_link_usage-output](#)

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetLinkUsage_OutputType"</code>	GetLinkUsage_OutputType

[get_perfparams-input](#)

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetPerfparams_InputType"</code>	GetPerfparams_InputType

[get_perfparams-output](#)

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetPerfparams_OutputType"</code>	GetPerfparams_OutputType

[get_perfparams_ts-input](#)

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetPerfparamsTs_InputType"</code>	GetPerfparamsTs_InputType

[get_perfparams_ts-output](#)

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetPerfparamsTs_OutputType"</code>	GetPerfparamsTs_OutputType

[get_resource_metrics-input](#)

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetResourceMetrics_InputType"</code>	GetResourceMetrics_InputType

[get_resource_metrics-output](#)

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetResourceMetrics_OutputType"</code>	GetResourceMetrics_OutputType

[get_service_metrics-input](#)

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetServiceMetrics_InputType"</code>	GetServiceMetrics_InputType

get_service_metrics-output

Name	Description	Schema
output <i>optional</i>	Example : "GetServiceMetrics_OutputType"	GetServiceMetrics_OutputType

get_sla_event_summary-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSlaEventSummary_InputType"	GetSlaEventSummary_InputType

get_sla_event_summary-output

Name	Description	Schema
output <i>optional</i>	Example : "GetSlaEventSummary_OutputType"	GetSlaEventSummary_OutputType

get_sla_event_ts-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSlaEventTs_InputType"	GetSlaEventTs_InputType

get_sla_event_ts-output

Name	Description	Schema
output <i>optional</i>	Example : "GetSlaEventTs_OutputType"	GetSlaEventTs_OutputType

get_switch_events-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSwitchEvents_InputType"	GetSwitchEvents_InputType

get_switch_events-output

Name	Description	Schema
output <i>optional</i>	Example : "GetSwitchEvents_OutputType"	GetSwitchEvents_OutputType

get_top_applications-input

Name	Description	Schema
input <i>optional</i>	Example : "GetTopApplications_InputType"	GetTopApplications_InputType

get_top_applications-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetTopApplications_OutputType"</code>	GetTopApplications_OutputType

get_top_n_alerts-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetTopNAlerts_InputType"</code>	GetTopNAlerts_InputType

get_top_n_alerts-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetTopNAlerts_OutputType"</code>	GetTopNAlerts_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : <code>"string"</code>	string
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

monitor_service-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"MonitorService_InputType"</code>	MonitorService_InputType

monitor_service-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"MonitorService_OutputType"</code>	MonitorService_OutputType

monitor_service_batch-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"MonitorServiceBatch_InputType"</code>	MonitorServiceBatch_InputType

monitor_service_batch-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"MonitorServiceBatch_OutputType"</code>	MonitorServiceBatch_OutputType

monitored_object

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

monitored_object_host

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

monitored_object_host{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
host_name <i>optional</i>	Host name. Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
object_type <i>optional</i>	Object type Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
tags <i>optional</i>	Dictionary of host tags. Example : <code>"[_csp-fmpm-provider_xsd_any]"</code>	xsd:any

monitored_object_param

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
uuid <i>optional</i>	Example : "string"	string

monitored_object_param{id}

Name	Description	Schema
device <i>optional</i>	Device ID. Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
object_params <i>optional</i>	Object Params as key/value pairs. Example : "[_csp-fmpm-provider_xsd_any]"	xsd:any
perms2 <i>optional</i>	Example : "PermType2"	PermType2
site <i>optional</i>	Site ID. Example : "string"	string
tenant <i>optional</i>	Tenant ID. Example : "string"	string

monitored_object_service

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

monitored_object_service{id}

Name	Description	Schema
attributes <i>optional</i>	Dictionary of service attributes. Example : "[_csp-fmpm-provider_xsd_any]"	xsd:any
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
object_type <i>optional</i>	Object type. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
service_name <i>optional</i>	Service name. Example : "string"	string

monitored_object_type

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`monitored_object_type{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
mandatory_tags <i>optional</i>	Mandatory tags for this object type. Example : <code>"string"</code>	string
object_type <i>optional</i>	Object type. Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`monitored_object{id}`

Name	Description	Schema
components <i>optional</i>	Components that are monitored in the device. Example : <code>"string"</code>	string
configdb_hostrecord_uuid <i>optional</i>	UUID of hostname record in Contrail configdb. This is an internal attribute and will be ignored if provided. Example : <code>"string"</code>	string
created_at <i>optional</i>	Creation timestamp. Example : <code>"[_csp-fmpm-provider_xsd_unsignedlong]"</code>	xsd:unsignedLong
display-name <i>optional</i>	Example : <code>"string"</code>	string
host_name <i>optional</i>	Host name. Example : <code>"string"</code>	string
id <i>optional</i>	Object ID - ucpe_device_id, vnf_id, ipsec_link_id, device ID of hub. Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
image_type <i>optional</i>	Image Type-vsr, ip_table. Example : <code>"string"</code>	string
ip <i>optional</i>	IP Address Example : <code>"string"</code>	string
network_service <i>optional</i>	Network Service ID. Example : <code>"string"</code>	string
object_type <i>optional</i>	Object Type-ucpe_device, ucpe_vnf, ipsec_link, vcpe_vnf, hub. Example : <code>"FmpmObjectType"</code>	FmpmObjectType

Name	Description	Schema
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
pop <i>optional</i>	Pop ID. Example : <code>"string"</code>	string
region <i>optional</i>	Region ID Example : <code>"string"</code>	string
role <i>optional</i>	Role of the monitored entity - ACTIVE/STANDBY. Example : <code>"string"</code>	string
server <i>optional</i>	Server ID-ucpe_device_id if applicable. Example : <code>"string"</code>	string
site <i>optional</i>	Site ID. Example : <code>"string"</code>	string
tenant <i>optional</i>	Tenant ID. Example : <code>"string"</code>	string

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

process_alert_status-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ProcessAlertStatus_InputType"</code>	ProcessAlertStatus_InputType

process_alert_status-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ProcessAlertStatus_OutputType"</code>	ProcessAlertStatus_OutputType

project

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

project{id}

Name	Description	Schema
alert_object <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_alert_object"]</code>	<code>< project{id}_alert_object > array</code>
alert_status_object <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_alert_status_object"]</code>	<code>< project{id}_alert_status_object > array</code>
api-access-list <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_api-access-list"]</code>	<code>< project{id}_api-access-list > array</code>
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
monitored_object <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_monitored_object"]</code>	<code>< project{id}_monitored_object > array</code>
monitored_object_param <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_monitored_object_param"]</code>	<code>< project{id}_monitored_object_param > array</code>
namespace <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_namespace"]</code>	<code>< project{id}_namespace > array</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
quota <i>optional</i>	Example : <code>"QuotaType"</code>	QuotaType
rule_actions <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_rule_actions"]</code>	<code>< project{id}_rule_actions > array</code>
rule_matchers <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_rule_matchers"]</code>	<code>< project{id}_rule_matchers > array</code>
rules <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_rules"]</code>	<code>< project{id}_rules > array</code>
sla_event <i>optional</i>	Example : <code>["_csp-fmpm-provider_project_id_sla_event"]</code>	<code>< project{id}_sla_event > array</code>

rule_actions

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`rule_actions{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
function <i>optional</i>	Rule action function. Example : <code>"RuleActionsFunctionType"</code>	RuleActionsFunctionType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
text <i>optional</i>	Action summary. Example : <code>"string"</code>	string

`rule_matchers`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`rule_matchers{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
function <i>optional</i>	Rule matching function. Example : <code>"RuleMatchersFunctionType"</code>	RuleMatchersFunctionType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
text <i>optional</i>	Match function summary. Example : <code>"string"</code>	string

`rules`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

rules{id}

Name	Description	Schema
actions <i>optional</i>	Rule action function. Example : "LeafrefType"	LeafrefType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
match <i>optional</i>	Rule matching function. Example : "LeafrefType"	LeafrefType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
priority <i>optional</i>	Rule priority Example : 0	integer(int32)
rule_context <i>optional</i>	Dictionary of rule context. Example : "[_csp-fmpm-provider_xsd_any] "	xsd:any
text <i>optional</i>	Rule summary. Example : "string"	string

sla_event

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

sla_event{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
dst_link <i>optional</i>	ID of link to where traffic is diverted after SLA violation occurs. Example : "string"	string
duration <i>optional</i>	SLA violation duration. Example : "[_csp-fmpm-provider_xsd_unsignedlong] "	xsd:unsignedLong
end_time <i>optional</i>	Timestamp of when SLA Event is cleared. Example : "[_csp-fmpm-provider_xsd_unsignedlong] "	xsd:unsignedLong
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
metrics <i>optional</i>	SLA violation metrics details. Example : "[_csp-fmpm-provider_xsd_any] "	xsd:any
perms2 <i>optional</i>	Example : "PermType2"	PermType2
site <i>optional</i>	Site ID. Example : "string"	string
sla_profile <i>optional</i>	SLA profile. Example : "string"	string

Name	Description	Schema
src_link <i>optional</i>	ID of link to location of SLA violation Example : "string"	string
start_time <i>optional</i>	Timestamp of when SLA event is raised. Example : "[_csp-fmpm-provider_xsd_unsignedlong] "	xsd:unsignedLong
tenant <i>optional</i>	Tenant ID. Example : "string"	string

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.5. CSP IAM Service

9.5.1. Overview

Data model of CSP IAM Service

Version information

Version : 3.0

URI scheme

BasePath : /iamsvc

Schemes : HTTP

Tags

- forgot_password_request : Forgot Password Request
- idp : SAML Identity Provider which is used to authenticate and authorize users
- trust : A trust represents a the trustor authorization to delegate roles to another user, the trustee
- user : A user is an entity under domain scope
- email-template : Template for email content
- create-user : Create user in keystone and sync it into cassandra. Optionally, associate user with specific roles to projects and add user to specific groups
- smtp-server-setting : SMTP Server settings
- tenant-type : tenant-type represents a type or flavor of JSM tenant. Each JSM tenant has its own resource limit. The tenant-type defines specific resource limits. A customer is assigned with a tenant-type defined here

Produces

- `application/json`

9.5.2. Resources

Create-user

Create user in keystone and sync it into cassandra. Optionally, associate user with specific roles to projects and add user to specific groups

Execute create-user RPC

```
POST /iamsvc/create-user
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		create-user-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	create-user-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/create-user"
```

Request body

```
{
  "input" : {
    "name" : "string",
    "password" : "string",
    "domain_id" : "string",
    "enabled" : true,
    "extra" : [ {
      "name" : "string"
    } ],
    "project_role" : [ {
      "project_name" : "string",
      "domain_name" : "string",
      "project_id" : "string",
      "role_name" : "string",
      "role_id" : "string"
    } ],
    "groups" : [ {
      "group_id" : "string",
      "group_name" : "string",
      "domain_name" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "uuid" : "string",
    "status" : "string",
    "details" : "string"
  }
}
```

Email-template

Template for email content

Add a new email-template

POST /iamsvc/email-template

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		email-template{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	email-template{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/iamsvc/email-template"`

Request body

```
{
  "template_name" : "string",
  "content_type" : { },
  "content" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Example HTTP response

Response 200

```
{
  "template_name" : "string",
  "content_type" : { },
  "content" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the email-template list

GET /iamsvc/email-template

Responses

HTTP Code	Description	Schema
200	Successful operation	< email-template > array

Example HTTP request

Request path

```
"/iamsvc/email-template"
```

Example HTTP response

Response 200

```
"array"
```

Get a single email-template

```
GET /iamsvc/email-template/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	email-template{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/email-template/0"
```

Example HTTP response

Response 200

```
{
  "template_name" : "string",
  "content_type" : { },
  "content" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update email-template information

```
PUT /iamsvc/email-template/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	email-template{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/email-template/0"
```

Example HTTP response

Response 200

```
{
  "template_name" : "string",
  "content_type" : { },
  "content" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single email-template

```
DELETE /iamsvc/email-template/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/email-template/0"
```

Forgot_password_request

Forgot Password Request

Add a new forgot_password_request

```
POST /iamsvc/forgot_password_request
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>forgot_password_request{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>forgot_password_request{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/forgot_password_request"
```

Request body

```

{
  "user_name" : "string",
  "user_id" : { },
  "reset_password_code" : 0,
  "reset_code_expiration_time" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "user_name" : "string",
  "user_id" : { },
  "reset_password_code" : 0,
  "reset_code_expiration_time" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the forgot_password_request list

GET /iamsvc/forgot_password_request

Responses

HTTP Code	Description	Schema
200	Successful operation	< forgot_password_request > array

Example HTTP request

Request path

```
"/iamsvc/forgot_password_request"
```

Example HTTP response

Response 200

```
"array"
```

Get a single forgot_password_request

```
GET /iamsvc/forgot_password_request/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	forgot_password_request{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/forgot_password_request/0"
```

Example HTTP response

Response 200

```
{
  "user_name" : "string",
  "user_id" : { },
  "reset_password_code" : 0,
  "reset_code_expiration_time" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update forgot_password_request information

```
PUT /iamsvc/forgot_password_request/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	forgot_password_request{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/forgot_password_request/0"
```

Example HTTP response

Response 200

```

{
  "user_name" : "string",
  "user_id" : { },
  "reset_password_code" : 0,
  "reset_code_expiration_time" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single forgot_password_request

```
DELETE /iamsvc/forgot_password_request/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/forgot_password_request/0"
```

Idp

SAML Identity Provider which is used to authenticate and authorize users

Add a new idp

```
POST /iamsvc/idp
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>idp{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>idp{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/idp"
```

Request body

```
{
  "description" : "string",
  "metaURL" : "string",
  "entityID" : "string",
  "nameID" : "string",
  "service-provider" : {
    "metaURL" : "string",
    "entityID" : "string",
    "acsURL" : "string",
    "webssoURL" : "string",
    "testURL" : "string"
  },
  "usages" : {
    "idx" : "string",
    "user-type" : "string",
    "authorization" : true,
    "username-pattern" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,

```

```

    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "description" : "string",
  "metaURL" : "string",
  "entityID" : "string",
  "nameID" : "string",
  "service-provider" : {
    "metaURL" : "string",
    "entityID" : "string",
    "acsURL" : "string",
    "webssoURL" : "string",
    "testURL" : "string"
  },
  "usages" : {
    "idx" : "string",
    "user-type" : "string",
    "authorization" : true,
    "username-pattern" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,

```

```
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Get the idp list

```
GET /iamsvc/idp
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< idp > array

Example HTTP request

Request path

```
"/iamsvc/idp"
```

Example HTTP response

Response 200

```
"array"
```

Get a single idp

```
GET /iamsvc/idp/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	idp{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/idp/0"
```

Example HTTP response

Response 200

```
{
  "description" : "string",
  "metaURL" : "string",
  "entityID" : "string",
  "nameID" : "string",
  "service-provider" : {
    "metaURL" : "string",
    "entityID" : "string",
    "acsURL" : "string",
    "webssoURL" : "string",
    "testURL" : "string"
  },
  "usages" : {
    "idx" : "string",
```

```
"user-type" : "string",
"authorization" : true,
"username-pattern" : "string"
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Update idp information

```
PUT /iamsvc/idp/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	idp{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/idp/0"
```

Example HTTP response

Response 200

```
{
  "description" : "string",
  "metaURL" : "string",
  "entityID" : "string",
  "nameID" : "string",
  "service-provider" : {
    "metaURL" : "string",
    "entityID" : "string",
    "acsURL" : "string",
    "webssoURL" : "string",
    "testURL" : "string"
  },
  "usages" : {
    "idx" : "string",
    "user-type" : "string",
    "authorization" : true,
    "username-pattern" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
```

```
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Delete a single idp

DELETE /iamsvc/idp/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/idp/0"
```

Smtp-server-setting

SMTP Server settings

Add a new smtp-server-setting

```
POST /iamsvc/smtp-server-setting
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		smtp-server-setting{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	smtp-server-setting{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/smtp-server-setting"
```

Request body

```
{
  "server_address" : "string",
  "port" : "string",
  "user_name" : "string",
  "password" : "string",
  "from_name" : "string",
  "from_email_address" : "string",
  "authenticated" : "<<_csp-iamsvc_xsd_boolean>>",
  "tls" : "<<_csp-iamsvc_xsd_boolean>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Example HTTP response

Response 200

```
{
  "server_address" : "string",
  "port" : "string",
  "user_name" : "string",
  "password" : "string",
  "from_name" : "string",
  "from_email_address" : "string",
  "authenticated" : "<<_csp-iamsvc_xsd_boolean>>",
  "tls" : "<<_csp-iamsvc_xsd_boolean>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the smtp-server-setting list

```
GET /iamsvc/smtp-server-setting
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< smtp-server-setting > array

Example HTTP request

Request path

```
"/iamsvc/smtp-server-setting"
```

Example HTTP response

Response 200

```
"array"
```

Get a single smtp-server-setting

```
GET /iamsvc/smtp-server-setting/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	smtp-server-setting{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/smtp-server-setting/0"
```

Example HTTP response

Response 200

```

{
  "server_address" : "string",
  "port" : "string",
  "user_name" : "string",
  "password" : "string",
  "from_name" : "string",
  "from_email_address" : "string",
  "authenticated" : "<<_csp-iamsvc_xsd_boolean>>",
  "tls" : "<<_csp-iamsvc_xsd_boolean>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update smtp-server-setting information

```
PUT /iamsvc/smtp-server-setting/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	smtp-server-setting{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/smtp-server-setting/0"
```

Example HTTP response

Response 200

```

{
  "server_address" : "string",
  "port" : "string",
  "user_name" : "string",
  "password" : "string",
  "from_name" : "string",
  "from_email_address" : "string",
  "authenticated" : "<<_csp-iamsvc_xsd_boolean>>",
  "tls" : "<<_csp-iamsvc_xsd_boolean>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single smtp-server-setting

```
DELETE /iamsvc/smtp-server-setting/{id0}
```


Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/smtp-server-setting/0"
```

Tenant-type

tenant-type represents a type or flavor of JSM tenant. Each JSM tenant has its own resource limit. The tenant-type defines specific resource limits. A customer is assigned with a tenant-type defined here

Add a new tenant-type

```
POST /iamsvc/tenant-type
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		tenant-type{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	tenant-type{id}
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/tenant-type"
```

Request body

```

{
  "type_name" : { },
  "resource_limit" : {
    "ns_instances" : 0,
    "vm_instances" : 0,
    "vl_instances" : 0,
    "vnf_instances" : 0,
    "bandwidth" : 0,
    "cores" : 0,
    "ram" : 0,
    "volume_size" : 0,
    "volumes" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "type_name" : { },
  "resource_limit" : {
    "ns_instances" : 0,
    "vm_instances" : 0,
    "vl_instances" : 0,
    "vnf_instances" : 0,
    "bandwidth" : 0,
    "cores" : 0,
    "ram" : 0,
    "volume_size" : 0,
    "volumes" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the tenant-type list

```
GET /iamsvc/tenant-type
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< tenant-type > array

Example HTTP request

Request path

```
"/iamsvc/tenant-type"
```

Example HTTP response

Response 200

```
"array"
```

Get a single tenant-type

```
GET /iamsvc/tenant-type/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	tenant-type{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/tenant-type/0"
```

Example HTTP response

Response 200

```

{
  "type_name" : { },
  "resource_limit" : {
    "ns_instances" : 0,
    "vm_instances" : 0,
    "vl_instances" : 0,
    "vnf_instances" : 0,
    "bandwidth" : 0,
    "cores" : 0,
    "ram" : 0,
    "volume_size" : 0,
    "volumes" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update tenant-type information

PUT /iamsvc/tenant-type/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	tenant-type{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/iamsvc/tenant-type/0"

Example HTTP response

Response 200


```

{
  "type_name" : { },
  "resource_limit" : {
    "ns_instances" : 0,
    "vm_instances" : 0,
    "vl_instances" : 0,
    "vnf_instances" : 0,
    "bandwidth" : 0,
    "cores" : 0,
    "ram" : 0,
    "volume_size" : 0,
    "volumes" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single tenant-type

```
DELETE /iamsvc/tenant-type/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/tenant-type/0"
```

Trust

A trust represents a the trustor authorization to delegate roles to another user, the trustee

Add a new trust

```
POST /iamsvc/trust
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		trust{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>trust{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/trust"
```

Request body

```

{
  "roles" : "string",
  "project_id" : "string",
  "trustee_id" : "string",
  "trustor_id" : "string",
  "impersonation" : "<<_csp-iamsvc_xsd_boolean>>",
  "redelegated_trust_id" : "string",
  "redelegation_count" : 0,
  "roles_index" : "string",
  "service_trust" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "roles" : "string",
  "project_id" : "string",
  "trustee_id" : "string",
  "trustor_id" : "string",
  "impersonation" : "<<_csp-iamsvc_xsd_boolean>>",
  "redelegated_trust_id" : "string",
  "redelegation_count" : 0,
  "roles_index" : "string",
  "service_trust" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the trust list

```
GET /iamsvc/trust
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< trust > array

Example HTTP request

Request path

```
"/iamsvc/trust"
```

Example HTTP response

Response 200

```
"array"
```

Get a single trust

```
GET /iamsvc/trust/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	trust{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/trust/0"
```

Example HTTP response

Response 200

```

{
  "roles" : "string",
  "project_id" : "string",
  "trustee_id" : "string",
  "trustor_id" : "string",
  "impersonation" : "<<_csp-iamsvc_xsd_boolean>>",
  "redelegated_trust_id" : "string",
  "redelegation_count" : 0,
  "roles_index" : "string",
  "service_trust" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update trust information

```
PUT /iamsvc/trust/{id0}
```


Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	trust{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/trust/0"
```

Example HTTP response

Response 200

```

{
  "roles" : "string",
  "project_id" : "string",
  "trustee_id" : "string",
  "trustor_id" : "string",
  "impersonation" : "<<_csp-iamsvc_xsd_boolean>>",
  "redelegated_trust_id" : "string",
  "redelegation_count" : 0,
  "roles_index" : "string",
  "service_trust" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single trust

```
DELETE /iamsvc/trust/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/trust/0"
```

User

A user is an entity under domain scope

Add a new user

```
POST /iamsvc/user
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>user{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>user{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/user"
```

Request body

```
{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Example HTTP response

Response 200

```
{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the user list

GET /iamsvc/user

Responses

HTTP Code	Description	Schema
200	Successful operation	< user > array

Example HTTP request

Request path

"/iamsvc/user"

Example HTTP response

Response 200

"array"

Get a single user

GET /iamsvc/user/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	user{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/iamsvc/user/0"

Example HTTP response

Response 200

```
{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update user information

```
PUT /iamsvc/user/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	user{id}

HTTP Code	Description	Schema
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/user/0"
```

Example HTTP response

Response 200

```
{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single user

```
DELETE /iamsvc/user/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc/user/0"
```

9.5.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

CreateDomain_InputType

Name	Description	Schema
description <i>optional</i>	description of domain. Example : "string"	string
enabled <i>optional</i>	Enables or disables the domain Example : true	boolean
extra <i>optional</i>	Example : ["ExtraInfoType"]	< ExtraInfoType > array

Name	Description	Schema
name <i>required</i>	name of domain. Example : "string"	string

CreateDomain_OutputType

Name	Description	Schema
details <i>optional</i>	details of creating domain, error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)
uuid <i>optional</i>	uuid of created domain. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CreateProject_InputType

Name	Description	Schema
description <i>optional</i>	description of project Example : "string"	string
domain_id <i>optional</i>	The ID of the domain for the project. If you omit the domain ID, default is the domain to which your token is scoped. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
enabled <i>optional</i>	Enables or disables the project Example : true	boolean
extra <i>optional</i>	Example : ["ExtraInfoType"]	< ExtraInfoType > array
is_domain <i>optional</i>	Indicates whether the project also acts as a domain Example : true	boolean
name <i>required</i>	name of project Example : "string"	string
parent_id <i>optional</i>	The ID of the parent project Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CreateProject_OutputType

Name	Description	Schema
details <i>optional</i>	details of creating project, error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)
uuid <i>optional</i>	uuid of created project. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CreateProvisionAgentUser_InputType

Name	Description	Schema
name <i>required</i>	User's name Example : "string"	string
password <i>required</i>	User's password Example : "string"	string

CreateProvisionAgentUser_OutputType

Name	Description	Schema
details <i>optional</i>	error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)
uuid <i>optional</i>	uuid of the created user. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CreateServiceTrust_InputType

Name	Description	Schema
impersonation <i>required</i>	If set to true, then the user attribute of tokens generated based on the trust will represent that of the trustor rather than the trustee, thus allowing the trustee to impersonate the trustor. If impersonation is set to false, then the token user attribute will represent that of the trustee. Example : true	boolean
project_uuid <i>required</i>	The project uuid upon which the trustor is delegating authorization. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
roles <i>optional</i>	Specifies the subset of the roles of trustor on the project_id to be granted to the trustee when the token is consumed. Example : "string"	string

CreateServiceTrust_OutputType

Name	Description	Schema
details <i>optional</i>	details of creating trust, error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)
uuid <i>optional</i>	uuid of created trust. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CreateSshRsaPair_InputType

Name	Description	Schema
uuid <i>required</i>	uuid of a project Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CreateSshRsaPair_OutputType

Name	Description	Schema
status <i>optional</i>	status of rpc call Example : "string"	enum (success, failed)

CreateUserInputGroupsType

Name	Description	Schema
domain_name <i>optional</i>	Name of group domain, default is Default Example : "string"	string
group_id <i>optional</i>	uuid of group Example : "string"	string
group_name <i>optional</i>	Name of group Example : "string"	string

CreateUserInputProjectRoleType

Name	Description	Schema
domain_name <i>optional</i>	Name of project domain, default is Default Example : "string"	string
project_id <i>optional</i>	uuid of project Example : "string"	string
project_name <i>optional</i>	Name of project Example : "string"	string
role_id <i>optional</i>	Id of role Example : "string"	string
role_name <i>optional</i>	Name of role Example : "string"	string

CreateUser_InputType

Name	Description	Schema
domain_id <i>optional</i>	User domain id Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
enabled <i>optional</i>	Enables or disables the domain Example : true	boolean
extra <i>optional</i>	Example : ["ExtraInfoType"]	< ExtraInfoType > array

Name	Description	Schema
groups <i>optional</i>	Example : ["CreateUserInputGroupsType"]	< CreateUserInputGroupsType > array
name <i>required</i>	Name of user Example : "string"	string
password <i>optional</i>	User password Example : "string"	string
project_role <i>optional</i>	Example : ["CreateUserInputProjectRoleType"]	< CreateUserInputProjectRoleType > array

CreateUser_OutputType

Name	Description	Schema
details <i>optional</i>	Details of creating user, error message if failure occurs Example : "string"	string
status <i>optional</i>	Status of rpc call Example : "string"	enum (success, failed)
uuid <i>optional</i>	Uuid of created user Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeleteDomain_InputType

Name	Description	Schema
uuid <i>required</i>	uuid of a domain. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeleteDomain_OutputType

Name	Description	Schema
details <i>optional</i>	details of deleting domain, error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)

DeleteProject_InputType

Name	Description	Schema
uuid <i>required</i>	uuid of a project. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeleteProject_OutputType

Name	Description	Schema
details <i>optional</i>	details of deleting project, error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

EditUserInputGroupsGrantListType

Name	Description	Schema
domain_name <i>optional</i>	Name of group domain, default is Default Example : "string"	string
group_id <i>optional</i>	uuid of group Example : "string"	string
group_name <i>optional</i>	Name of group Example : "string"	string

EditUserInputGroupsRevokeListType

Name	Description	Schema
domain_name <i>optional</i>	Name of group domain, default is Default Example : "string"	string
group_id <i>optional</i>	uuid of group Example : "string"	string
group_name <i>optional</i>	Name of group Example : "string"	string

EditUserInputProjectRoleGrantListType

Name	Description	Schema
domain_name <i>optional</i>	Name of project domain, default is Default Example : "string"	string
project_id <i>optional</i>	uuid of project Example : "string"	string
project_name <i>optional</i>	Name of project Example : "string"	string
role_id <i>optional</i>	Id of role Example : "string"	string

Name	Description	Schema
role_name <i>optional</i>	Name of role Example : <code>"string"</code>	string

EditUserInputProjectRoleRevokeListType

Name	Description	Schema
domain_name <i>optional</i>	Name of project domain, default is Default Example : <code>"string"</code>	string
project_id <i>optional</i>	uuid of project Example : <code>"string"</code>	string
project_name <i>optional</i>	Name of project Example : <code>"string"</code>	string
role_id <i>optional</i>	Id of role Example : <code>"string"</code>	string
role_name <i>optional</i>	Name of role Example : <code>"string"</code>	string

EditUser_InputType

Name	Description	Schema
enabled <i>optional</i>	Enables or disables the domain if to be changed Example : <code>true</code>	boolean
extra <i>optional</i>	Example : <code>["ExtraInfoType"]</code>	< ExtraInfoType > array
groups_grant_list <i>optional</i>	Example : <code>["EditUserInputGroupsGrantListType"]</code>	< EditUserInputGroupsGrantListType > array
groups_revoke_list <i>optional</i>	Example : <code>["EditUserInputGroupsRevokeListType"]</code>	< EditUserInputGroupsRevokeListType > array
project_role_grant_list <i>optional</i>	Example : <code>["EditUserInputProjectRoleGrantListType"]</code>	< EditUserInputProjectRoleGrantListType > array
project_role_revoke_list <i>optional</i>	Example : <code>["EditUserInputProjectRoleRevokeListType"]</code>	< EditUserInputProjectRoleRevokeListType > array
uuid <i>optional</i>	Uuid of user whose properties are to be edited Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

EditUser_OutputType

Name	Description	Schema
details <i>optional</i>	Details of editing user, error message if failure occurs Example : <code>"string"</code>	string

Name	Description	Schema
status <i>optional</i>	Status of rpc call Example : "string"	enum (success, failed)

EmailContentType

Format of the email content

Type : string

ExtraInfoType

Name	Description	Schema
name <i>optional</i>	Example : "string"	string

GetAuthConfigOutputAuthenticationType

Name	Description	Schema
auth_mode <i>optional</i>	Authentication mode for cloud users Example : "string"	enum (local, saml2-local, saml2)
idp_display_name <i>optional</i>	Identity Provider display name if SAML2 authentication is used Example : "string"	string
idp_id <i>optional</i>	Identity Provider ID if SAML2 authentication is used Example : "string"	string
idp_name <i>optional</i>	Identity Provider name if SAML2 authentication is used Example : "string"	string
user_type <i>optional</i>	Type of user Example : "string"	string
username_pattern <i>optional</i>	Username pattern that are authenticated using this authentication mechanism Example : "string"	string

GetAuthConfigOutputIdpType

Name	Description	Schema
idp_display_name <i>optional</i>	IdP display name Example : "string"	string
idp_id <i>optional</i>	IdP ID Example : "string"	string
idp_name <i>optional</i>	IdP name Example : "string"	string

GetAuthConfig_InputType

Name	Description	Schema
username <i>optional</i>	Filter by username Example : "string"	string

GetAuthConfig_OutputType

Name	Description	Schema
authentication <i>optional</i>	Example : ["GetAuthConfigOutputAuthenticationType"]	< GetAuthConfigOutputAuthenticationType > array
idp <i>optional</i>	Example : ["GetAuthConfigOutputIdpType"]	< GetAuthConfigOutputIdpType > array

GetAuthMode_InputType

Name	Description	Schema
user-type <i>optional</i>	Type of user Example : "string"	string

GetAuthMode_OutputType

Name	Description	Schema
auth-mode <i>optional</i>	Authentication mode for cloud users Example : "string"	string
idp-id <i>optional</i>	Identity Provider ID if SAML2 authentication is used Example : "string"	string
username-pattern <i>optional</i>	Username pattern that are authenticated using this authentication mechanism Example : "string"	string

GetUserCapabilities_OutputType

Name	Description	Schema
capabilities <i>optional</i>	List of capabilities Example : "string"	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean

Name	Description	Schema
uuid <i>optional</i>	Example : "UuidType"	UuidType

IdpServiceProviderType

Name	Description	Schema
acsURL <i>optional</i>	Assertion Consumer Service URL Example : "string"	string
entityID <i>optional</i>	Entity ID of Service Provider Example : "string"	string
metaURL <i>optional</i>	Metadata URL of Service Provider Example : "string"	string
testURL <i>optional</i>	URL to test SAML attributes Example : "string"	string
webssoURL <i>optional</i>	URL for websso Example : "string"	string

IdpUsagesType

Name	Description	Schema
authorization <i>optional</i>	If enabled, SAML assertion attributes are used to do authorization. Otherwise only SAML authentication is done and authorization is done locally Example : true	boolean
idx <i>required</i>	Index of usages list Example : "string"	string
user-type <i>optional</i>	Type of users that are authenticated with this IdP Example : "string"	string
username-pattern <i>optional</i>	User pattern is used to identify IdP to locate an IdP for specific username Example : "string"	string

IssueTrustToken_InputType

Name	Description	Schema
impersonation <i>optional</i>	If set to true, then the user attribute of tokens generated based on the trust will represent that of the trustor rather than the trustee Example : true	boolean
onboard_trust <i>optional</i>	If set to true, then a tenant trust will be onboarded to service account, allowing service account to start job on behalf of caller. Default set to true Example : true	boolean
project_name <i>optional</i>	Name of project to access with trust token Example : "string"	string
roles <i>optional</i>	List of roles for trust Example : "string"	string

IssueTrustToken_OutputType

Name	Description	Schema
details <i>optional</i>	error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)

OnboardNamespace_InputType

Name	Description	Schema
admin_password <i>required</i>	Admin user password of new namespace Example : "string"	string
admin_role <i>required</i>	Role name of admin user for new namespace Example : "string"	string
admin_user <i>required</i>	Admin user name of new namespace Example : "string"	string
default_admin_project <i>optional</i>	Default admin project name. Optional if namespace if project scope Example : "string"	string
namespace <i>required</i>	Name of namespace Example : "string"	string
scope <i>required</i>	Scope of new namespace Example : "string"	string

OnboardNamespace_OutputType

Name	Description	Schema
admin_uuid <i>optional</i>	uuid of admin user. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
default_admin_project_uuid <i>optional</i>	uuid of default admin project. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
details <i>optional</i>	error message if failure occurs Example : "string"	string
namespace_uuid <i>optional</i>	uuid of namespace. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string

Name	Description	Schema
group_access <i>optional</i>	Example : 0	integer(int32)
other_access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner-access <i>optional</i>	Example : 0	integer(int32)
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

ProjectRsaType

Name	Description	Schema
rsa_private_key <i>optional</i>	private rsa key for device access Example : "string"	string
rsa_public_key <i>optional</i>	public rsa key for device access Example : "string"	string

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string

Name	Description	Schema
role_name <i>optional</i>	Example : <code>"string"</code>	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : [<code>"RbacRuleType"</code>]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : <code>"string"</code>	string
rule_object <i>optional</i>	Example : <code>"string"</code>	string
rule_perms <i>optional</i>	Example : <code>"RbacPermType"</code>	RbacPermType

SendEmailWithTemplateInputContextType

Name	Description	Schema
key <i>optional</i>	Key name of placeholder in the template Example : <code>"string"</code>	string
value <i>optional</i>	Value of the key placeholder in the template Example : <code>"string"</code>	string

SendEmailWithTemplate_InputType

Name	Description	Schema
content_template_name <i>optional</i>	Name of template to use for email content Example : <code>"string"</code>	string
context <i>optional</i>	Example : [<code>"SendEmailWithTemplateInputContextType"</code>]	< SendEmailWithTemplateInputContextType > array
to <i>optional</i>	User's email address Example : <code>"string"</code>	string

SendEmailWithTemplate_OutputType

Name	Description	Schema
details <i>optional</i>	error message if failure occurs Example : <code>"string"</code>	string
status <i>optional</i>	status of rpc call. Example : <code>"string"</code>	enum (success, failed)

SendEmail_InputType

Name	Description	Schema
content <i>optional</i>	Email content Example : "string"	string
content_type <i>optional</i>	Format of the email content Example : "string"	string
subject <i>optional</i>	Email subject Example : "string"	string
to <i>optional</i>	User's email address Example : "string"	string

SendEmail_OutputType

Name	Description	Schema
details <i>optional</i>	error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)

SetAuthMode_InputType

Name	Description	Schema
auth-mode <i>optional</i>	Authentication mode for cloud users Example : "string"	string
idp-id <i>optional</i>	Identity Provider ID if SAML2 authentication is used Example : "string"	string
user-type <i>optional</i>	Type of user Example : "string"	string
username-pattern <i>optional</i>	Username pattern that are authenticated using this authentication mechanism Example : "string"	string

SetAuthMode_OutputType

Name	Description	Schema
details <i>optional</i>	error message if failure occurs Example : "string"	string
status <i>optional</i>	status of rpc call. Example : "string"	enum (success, failed)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string
tenant_access <i>optional</i>	Example : 0	integer(int32)

TenantTypeResourceLimitType

Name	Description	Schema
bandwidth <i>optional</i>	max bandwidth that can be allocated Example : 0	integer(int32)
cores <i>optional</i>	number of cores that can be allocated Example : 0	integer(int32)
ns_instances <i>optional</i>	number of network instances that can be instantiated Example : 0	integer(int32)
ram <i>optional</i>	size of ram that can be allocated Example : 0	integer(int32)
vl_instances <i>optional</i>	number of virtual link instances that can be created Example : 0	integer(int32)
vm_instances <i>optional</i>	number of vm instances that can be spawned Example : 0	integer(int32)
vnf_instances <i>optional</i>	number of vnf instances that can be spawned Example : 0	integer(int32)
volume_size <i>optional</i>	size of each volume Example : 0	integer(int32)
volumes <i>optional</i>	number of volumes that can be allocated Example : 0	integer(int32)

TenantTypeTypeNameType

category of resource allocation

Type : enum (default, small, medium, large, xlarge)

TimestampType

The time when the reset password code expires

Type : integer

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

YangUuidType

The UUID of the parent project.

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["[_csp-iamsvc_config-root_id_domain]"]</code>	<code>< config-root{id}_domain ></code> array
global-system-config <i>optional</i>	Example : <code>["[_csp-iamsvc_config-root_id_global-system-config]"]</code>	<code>< config-root{id}_global-system-config ></code> array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

create-domain-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateDomain_InputType"</code>	CreateDomain_InputType

create-domain-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateDomain_OutputType"</code>	CreateDomain_OutputType

create-project-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateProject_InputType"</code>	CreateProject_InputType

create-project-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateProject_OutputType"</code>	CreateProject_OutputType

create-provision-agent-user-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateProvisionAgentUser_InputType"</code>	CreateProvisionAgentUser_InputType

create-provision-agent-user-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateProvisionAgentUser_OutputType"</code>	<code>CreateProvisionAgentUser_OutputType</code>

`create-service-trust-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateServiceTrust_InputType"</code>	<code>CreateServiceTrust_InputType</code>

`create-service-trust-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateServiceTrust_OutputType"</code>	<code>CreateServiceTrust_OutputType</code>

`create-ssh-rsa-pair-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateSshRsaPair_InputType"</code>	<code>CreateSshRsaPair_InputType</code>

`create-ssh-rsa-pair-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateSshRsaPair_OutputType"</code>	<code>CreateSshRsaPair_OutputType</code>

`create-user-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateUser_InputType"</code>	<code>CreateUser_InputType</code>

`create-user-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateUser_OutputType"</code>	<code>CreateUser_OutputType</code>

`delete-domain-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteDomain_InputType"</code>	<code>DeleteDomain_InputType</code>

`delete-domain-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteDomain_OutputType"</code>	DeleteDomain_OutputType

delete-project-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteProject_InputType"</code>	DeleteProject_InputType

delete-project-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteProject_OutputType"</code>	DeleteProject_OutputType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-iamsvc_domain_id_api-access-list"]</code>	< domain{id}_api-access-list > array
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-iamsvc_domain_id_namespace"]</code>	< domain{id}_namespace > array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
project <i>optional</i>	Example : <code>["_csp-iamsvc_domain_id_project"]</code>	< domain{id}_project > array
user <i>optional</i>	Example : <code>["_csp-iamsvc_domain_id_user"]</code>	< domain{id}_user > array

edit-user-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"EditUser_InputType"</code>	EditUser_InputType

`edit-user-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"EditUser_OutputType"</code>	EditUser_OutputType

`email-template`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`email-template{id}`

Name	Description	Schema
content <i>optional</i>	Template content Example : <code>"string"</code>	string
content_type <i>optional</i>	Format of the email content Example : <code>"EmailContentType"</code>	EmailContentType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
template_name <i>optional</i>	Template name Example : <code>"string"</code>	string

`forgot_password_request`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`forgot_password_request{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
reset_code_expiration_time <i>optional</i>	The time when the reset password code expires Example : "TimestampType"	TimestampType
reset_password_code <i>optional</i>	Reset password code Example : 0	integer(int32)
user_id <i>optional</i>	User's Keystone id Example : "YangUuidType"	YangUuidType
user_name <i>optional</i>	User's name Example : "string"	string

get-auth-config-input

Name	Description	Schema
input <i>optional</i>	Example : "GetAuthConfig_InputType"	GetAuthConfig_InputType

get-auth-config-output

Name	Description	Schema
output <i>optional</i>	Example : "GetAuthConfig_OutputType"	GetAuthConfig_OutputType

get-auth-mode-input

Name	Description	Schema
input <i>optional</i>	Example : "GetAuthMode_InputType"	GetAuthMode_InputType

get-auth-mode-output

Name	Description	Schema
output <i>optional</i>	Example : "GetAuthMode_OutputType"	GetAuthMode_OutputType

get-user-capabilities-input

Name	Description	Schema
input <i>optional</i>	Example : "[_csp-iamsvc_getusercapabilities_inputtype]"	GetUserCapabilities_InputType

get-user-capabilities-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetUserCapabilities_OutputType"</code>	GetUserCapabilities_OutputType

[global-system-config](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[global-system-config{id}](#)

Name	Description	Schema
config-version <i>optional</i>	Example : <code>"string"</code>	string
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

[idp](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[idp{id}](#)

Name	Description	Schema
description <i>optional</i>	Description for the IdP Example : <code>"string"</code>	string
display-name <i>optional</i>	Example : <code>"string"</code>	string
entityID <i>optional</i>	EntityID of IdP retrieved by parsing metadata Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
metaURL <i>optional</i>	Entity meta data URL for the IdP Example : <code>"string"</code>	string
nameID <i>optional</i>	NameID of IdP retrieved by parsing metadata Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

Name	Description	Schema
service-provider <i>optional</i>	URLs for SAML service provider. This is passed over it identity provider Example : <code>"IdpServiceProviderType"</code>	IdpServiceProviderType
usages <i>optional</i>	Usage of IdP Example : <code>"IdpUsagesType"</code>	IdpUsagesType

issue-trust-token-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"IssueTrustToken_InputType"</code>	IssueTrustToken_InputType

issue-trust-token-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"IssueTrustToken_OutputType"</code>	IssueTrustToken_OutputType

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

onboard-namespace-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"OnboardNamespace_InputType"</code>	OnboardNamespace_InputType

onboard-namespace-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"OnboardNamespace_OutputType"</code>	OnboardNamespace_OutputType

project

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-iamsvc_project_id_api-access-list"]</code>	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-iamsvc_project_id_namespace"]</code>	< project{id}_namespace > array
parent_project_uuid <i>optional</i>	The UUID of the parent project. Example : <code>"YangUuidType"</code>	YangUuidType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
quota <i>optional</i>	Example : <code>"QuotaType"</code>	QuotaType
rsa <i>optional</i>	contains public and private keys for device access Example : <code>"ProjectRsaType"</code>	ProjectRsaType

send-email-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"SendEmail_InputType"</code>	SendEmail_InputType

send-email-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"SendEmail_OutputType"</code>	SendEmail_OutputType

send-email-with-template-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"SendEmailWithTemplate_InputType"</code>	SendEmailWithTemplate_InputType

send-email-with-template-output

Name	Description	Schema
output <i>optional</i>	Example : "SendEmailWithTemplate_OutputType"	SendEmailWithTemplate_OutputType

set-auth-mode-input

Name	Description	Schema
input <i>optional</i>	Example : "SetAuthMode_InputType"	SetAuthMode_InputType

set-auth-mode-output

Name	Description	Schema
output <i>optional</i>	Example : "SetAuthMode_OutputType"	SetAuthMode_OutputType

smtp-server-setting

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

smtp-server-setting{id}

Name	Description	Schema
authenticated <i>optional</i>	If set to true, the mail server is authenticated. Otherwise, server is unauthenticated. Example : "[_csp-iamsvc_xsd_boolean]"	xsd:boolean
display-name <i>optional</i>	Example : "string"	string
from_email_address <i>optional</i>	From email address for unauthenticated server Example : "string"	string
from_name <i>optional</i>	Name of user sending the email for unauthenticated server Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
password <i>optional</i>	Password for SMTP Authentication Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
port <i>optional</i>	Port for SMTP server Example : "string"	string
server_address <i>optional</i>	Host address for SMTP server Example : "string"	string

Name	Description	Schema
tls <i>optional</i>	If set to true, TLS is used. Example : "[_csp-iamsvc_xsd_boolean]"	xsd:boolean
user_name <i>optional</i>	User name for SMTP Authenticaon Example : "string"	string

tenant-type

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

tenant-type{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
resource_limit <i>optional</i>	Upper limit of resource. Example : "TenantTypeResourceLimitType"	TenantTypeResourceLimitType
type_name <i>optional</i>	category of resource allocation Example : "TenantTypeTypeNameType"	TenantTypeTypeNameType

trust

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

trust{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
impersonation <i>optional</i>	If set to true, then the user attribute of tokens generated based on the trust will represent that of the trustor rather than the trustee. Example : "[_csp-iamsvc_xsd_boolean]"	xsd:boolean
perms2 <i>optional</i>	Example : "PermType2"	PermType2

Name	Description	Schema
project_id <i>optional</i>	Identifies the project upon which the trustor is delegating authorization. Example : <code>"string"</code>	string
redelegated_trust_id <i>optional</i>	Returned with redelegated trust provides information about the predecessor in the trust chain. Example : <code>"string"</code>	string
redelegation_count <i>optional</i>	Specifies the maximum remaining depth of the redelegated trust chain. Example : <code>0</code>	integer(int32)
roles <i>optional</i>	Specifies the subset of the roles of trustor on the project_id to be granted to the trustee when the token is consumed Example : <code>"string"</code>	string
roles_index <i>optional</i>	Roles index for the trust. Example : <code>"string"</code>	string
service_trust <i>optional</i>	Indicate if the trust is a service trust. A service trust, if set to 1, is a trust granted to service account which allow service account to do job on behalf of trustor. Example : <code>"string"</code>	string
trustee_id <i>optional</i>	Represents the user who is capable of consuming the trust. Example : <code>"string"</code>	string
trustor_id <i>optional</i>	Represents the user who created the trust, and whose authorization is being delegated. Example : <code>"string"</code>	string

user

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

user{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.6. IAM Service for Unauthenticated Use

9.6.1. Overview

Data model of CSP Iamsvc Noauth

Version information

Version : 3.0

URI scheme

BasePath : /iamsvc-noauth

Schemes : HTTP

Tags

- recover-password : Reset password for the user
- change-password : change password
- verify-password-reset-code : Verify user password reset code
- forgot-password : Send Forgot Password request to get reset password link in email

Produces

- application/json

9.6.2. Resources

Change-password

change password

Execute change-password RPC

```
POST /iamsvc-noauth/change-password
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		change-password-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	change-password-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc-noauth/change-password"
```

Request body


```
{
  "input" : {
    "user_name" : "string",
    "old_password" : "string",
    "new_password" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

Forgot-password

Send Forgot Password request to get reset password link in email

Execute forgot-password RPC

```
POST /iamsvc-noauth/forgot-password
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		forgot-password-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	forgot-password-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc-noauth/forgot-password"
```

Request body

```
{
  "input" : {
    "user_name" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

Recover-password

Reset password for the user

Execute recover-password RPC

```
POST /iamsvc-noauth/recover-password
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		recover-password-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	recover-password-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/iamsvc-noauth/recover-password"
```

Request body

```
{
  "input" : {
    "user_name" : "string",
    "new_password" : "string",
    "reset_password_code" : 0
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

Verify-password-reset-code

Verify user password reset code

Execute verify-password-reset-code RPC

POST /iamsvc-noauth/verify-password-reset-code

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		verify-password-reset-code-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	verify-password-reset-code-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/iamsvc-noauth/verify-password-reset-code"

Request body

```
{
  "input" : {
    "user_name" : "string",
    "reset_password_code" : 0
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "status" : "string"
  }
}

```

9.6.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

ChangePassword_InputType

Name	Description	Schema
new_password <i>required</i>	New Password Example : "string"	string
old_password <i>required</i>	Old Password Example : "string"	string
user_name <i>required</i>	User Name Example : "string"	string

ChangePassword_OutputType

Name	Description	Schema
status <i>optional</i>	status of rpc call Example : "string"	enum (success, in-progress, failed)

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

ForgotPassword_InputType

Name	Description	Schema
user_name <i>required</i>	User's name Example : "string"	string

ForgotPassword_OutputType

Name	Description	Schema
status <i>optional</i>	status of rpc call Example : "string"	enum (success, in-progress, failed)

GetIdpForUser_InputType

Name	Description	Schema
username <i>optional</i>	Username for which the IdP needs to be found Example : "string"	string

GetIdpForUser_OutputType

Name	Description	Schema
idp <i>optional</i>	IdP name Example : "string"	string
websso <i>optional</i>	Base websso URL Example : "string"	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean

Name	Description	Schema
uuid <i>optional</i>	Example : "UuidType"	UuidType

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
group_access <i>optional</i>	Example : 0	integer(int32)
other_access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner-access <i>optional</i>	Example : 0	integer(int32)
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string
rule_object <i>optional</i>	Example : "string"	string
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

RecoverPassword_InputType

Name	Description	Schema
new_password <i>required</i>	User's new password Example : "string"	string
reset_password_code <i>required</i>	Reset password code Example : 0	integer(int32)
user_name <i>required</i>	User's name Example : "string"	string

RecoverPassword_OutputType

Name	Description	Schema
status <i>optional</i>	status of rpc call Example : "string"	enum (success, in-progress, failed)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string
tenant_access <i>optional</i>	Example : 0	integer(int32)

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

VerifyPasswordResetCode_InputType

Name	Description	Schema
reset_password_code <i>required</i>	Reset password code Example : 0	integer(int32)
user_name <i>required</i>	User's name Example : "string"	string

VerifyPasswordResetCode_OutputType

Name	Description	Schema
status <i>optional</i>	status of rpc call Example : "string"	enum (success, in-progress, failed)

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

change-password-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ChangePassword_InputType"</code>	ChangePassword_InputType

change-password-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ChangePassword_OutputType"</code>	ChangePassword_OutputType

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-iamsvc-noauth_config-root_id_domain"]</code>	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : <code>["_csp-iamsvc-noauth_config-root_id_global-system-config"]</code>	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["[_csp-iamsvc-noauth_domain_id_api-access-list]"]</code>	<code>< domain{id}_api-access-list ></code> array
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["[_csp-iamsvc-noauth_domain_id_namespace]"]</code>	<code>< domain{id}_namespace ></code> array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
project <i>optional</i>	Example : <code>["[_csp-iamsvc-noauth_domain_id_project]"]</code>	<code>< domain{id}_project ></code> array

forgot-password-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ForgotPassword_InputType"</code>	ForgotPassword_InputType

forgot-password-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ForgotPassword_OutputType"</code>	ForgotPassword_OutputType

get-idp-for-user-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetIdpForUser_InputType"</code>	GetIdpForUser_InputType

get-idp-for-user-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetIdpForUser_OutputType"</code>	GetIdpForUser_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[csp-iamsvc-noauth_project_id_api-access-list]"]	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[csp-iamsvc-noauth_project_id_namespace]"]	< project{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
quota <i>optional</i>	Example : "QuotaType"	QuotaType

recover-password-input

Name	Description	Schema
input <i>optional</i>	Example : "RecoverPassword_InputType"	RecoverPassword_InputType

recover-password-output

Name	Description	Schema
output <i>optional</i>	Example : "RecoverPassword_OutputType"	RecoverPassword_OutputType

verify-password-reset-code-input

Name	Description	Schema
input <i>optional</i>	Example : "VerifyPasswordResetCode_InputType"	VerifyPasswordResetCode_InputType

verify-password-reset-code-output

Name	Description	Schema
output <i>optional</i>	Example : "VerifyPasswordResetCode_OutputType"	VerifyPasswordResetCode_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

`yang-schema{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
es-schema <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>
json-schema <i>optional</i>	Example : <code>"string"</code>	string
module-name <i>optional</i>	Example : <code>"string"</code>	string
namespace <i>optional</i>	Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>
revision <i>optional</i>	Example : <code>"string"</code>	string
yin-schema <i>optional</i>	Example : <code>"string"</code>	string

9.7. Image Management Service (Central)

9.7.1. Overview

Data model of CSP Image management Central.

Version information

Version : 3.0

URI scheme

BasePath : /ims-central

Schemes : HTTP

Tags

- `install_device_package` : Install package on device.
- `delete_image` : Delete image.
- `get_imagefileurl` : Get image file URL based on region ID and file UUID.
- `deploy_image` : Deploying/upgrading an image on device.
- `upload_image_file` : Upload Image file using multipart form data. Content type is multipart/form-data.

Produces

- `application/json`

9.7.2. Resources

Delete_image

Delete image.

Execute delete_image RPC

```
POST /ims-central/delete_image
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		delete_image-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	delete_image-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/ims-central/delete_image"
```

Request body

```
{
  "input" : {
    "fqname" : "string",
    "uuid" : "string"
  }
}
```


Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "message" : "string"
  }
}
```

Deploy_image

Deploying/upgrading an image on device.

Execute `deploy_image` RPC

```
POST /ims-central/deploy_image
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		deploy_image-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	deploy_image-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/ims-central/deploy_image"
```

Request body

```
{
  "input" : {
    "fname" : "string",
    "uuid" : "string",
    "component_name" : "string",
    "device" : [ {
      "device_id" : "string",
      "device_component_name" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string"
  }
}
```

Get_imagefileurl

Get image file URL based on region ID and file UUID.

Execute get_imagefileurl RPC

```
POST /ims-central/get_imagefileurl
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_imagefileurl-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_imagefileurl-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/ims-central/get_imagefileurl"
```

Request body

```
{
  "input" : {
    "fname" : "string",
    "uuid" : "string",
    "region_name" : "string",
    "expiry_time" : 0
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "file_url" : "string",
    "external_file_url" : "string"
  }
}
```

Install_device_package

Install package on device.

Execute install_device_package RPC

```
POST /ims-central/install_device_package
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		install_device_package-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	install_device_package-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/ims-central/install_device_package"
```

Request body

```
{
  "input" : {
    "device_id" : "string",
    "component_name" : "string",
    "package_image_uuid" : "string",
    "notification_url" : "string",
    "install_script_params" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "requestid" : "string"
  }
}
```

Upload_image_file

Upload Image file using multipart form data. Content type is multipart/form-data.

Execute upload_image_file RPC

```
POST /ims-central/upload_image_file
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		upload_image_file-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	upload_image_file-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/ims-central/upload_image_file"
```

Request body

```
{
  "input" : {
    "cname" : "string",
    "description" : "string",
    "image_type" : "string",
    "vendor" : "string",
    "device_family" : "string",
    "minor_version" : 0,
    "build_num" : "string",
    "supported_platform" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "progress" : "string",
    "status" : "string",
    "imagefile_uuid" : "string",
    "imagefile_uri" : "string",
    "failed_list" : [ {
      "name" : "string",
      "error_data" : {
        "error_code" : "string",
        "error_tag" : "string",
        "error_message" : "string",
        "error_diag" : "string",
        "error_href" : "string"
      }
    } ]
  }
}
```

9.7.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

DeleteImage_InputType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeleteImage_OutputType

Name	Description	Schema
message <i>optional</i>	Message from server. Example : "string"	string
status <i>optional</i>	Status of delete. Example : "string"	string

DeployImageInputDeviceType

Name	Description	Schema
device_component_name <i>optional</i>	Component name of the device such as JDM or GWR or JUNOS to distinguish netconf channel. Example : "string"	string
device_id <i>optional</i>	Device ID. Example : "string"	string

DeployImage_InputType

Name	Description	Schema
component_name <i>optional</i>	Component name is obsolete. Use the device_component_name in the device list. Example : "string"	string
device <i>optional</i>	Example : ["DeployImageInputDeviceType"]	< DeployImageInputDeviceType > array
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeployImage_OutputType

Name	Description	Schema
job_id <i>optional</i>	A Job ID for this job. Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

FailedListErrorDataType

Name	Description	Schema
error_code <i>optional</i>	Unique error code that identifies the error condition detected. Other leaves in this grouping are looked up from error definitions file using this code. This is of the format <ms-name>:<integer-error-code> Example : "string"	string
error_diag <i>optional</i>	A diagnostic message describing probable cause for the error, troubleshooting tips, etc. as defined in the error definitions file. Example : "string"	string
error_href <i>optional</i>	A URL from where details about the error code can be obtained. Example : "string"	string
error_message <i>optional</i>	A detailed message describing the error condition. This is formed from the message in the error definitions file with contextual information filled in. Example : "string"	string
error_tag <i>optional</i>	A short name for the error condition. Example : "string"	string

GetImagefileurl_InputType

Name	Description	Schema
expiry_time <i>required</i>	Time lapse until URL expires, in seconds. For example, 24 hrs' duration is 60*60*24. Example : 0	integer(int64)
fqname <i>optional</i>	Example : "string"	string
region_name <i>required</i>	Region name. Example : "string"	string
uuid <i>optional</i>	Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetImagefileurl_OutputType

Name	Description	Schema
external_file_url <i>optional</i>	An external file URL using NAT (if present) or HA proxy, based on the specified region. This url requires no auth to download for the specified duration Example : "string"	string
file_url <i>optional</i>	Internal file URL, based on the specified region. This url requires no auth to download for the specified duration Example : "string"	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

InstallDevicePackage_InputType

Name	Description	Schema
component_name <i>optional</i>	Component name such as JDM or JCP to distinguish netconf channel. If not specified then primary component will be used. Example : "string"	string
device_id <i>optional</i>	Device ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
install_script_params <i>optional</i>	Install script parameters. Example : "string"	string
notification_url <i>optional</i>	AMQP URL where response message will be posted for the caller. Example : "string"	string
package_image_uuid <i>optional</i>	Package image UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

InstallDevicePackage_OutputType

Name	Description	Schema
requestid <i>optional</i>	A generated unique ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
group_access <i>optional</i>	Example : 0	integer(int32)
other_access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner-access <i>optional</i>	Example : 0	integer(int32)
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : <code>"string"</code>	string
role_name <i>optional</i>	Example : <code>"string"</code>	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : <code>["RbacRuleType"]</code>	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : <code>"string"</code>	string
rule_object <i>optional</i>	Example : <code>"string"</code>	string
rule_perms <i>optional</i>	Example : <code>"RbacPermType"</code>	RbacPermType

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : <code>"string"</code>	string
tenant_access <i>optional</i>	Example : <code>0</code>	integer(int32)

UploadImageFileOutputFailedList Type

Name	Description	Schema
error_data <i>optional</i>	Example : <code>"FailedListErrorDataType"</code>	FailedListErrorDataType
name <i>optional</i>	The name of step. Example : <code>"string"</code>	string

UploadImageFile_InputType

Name	Description	Schema
build_num <i>optional</i>	Build number Example : <code>"string"</code>	string
cname <i>optional</i>	This is a canonical name inputted by the user and is not unique. It is different from the raw file name extracted from the file. Example : <code>"string"</code>	string

Name	Description	Schema
description <i>optional</i>	Description about the image, like 'this is a composite image' or 'this is a JDM-only image.' Example : <code>"string"</code>	string
device_family <i>required</i>	Device family of devices on which this image can be installed. Example : <code>"string"</code>	string
image_type <i>required</i>	Image types supported. Example : <code>"string"</code>	enum (DEVICE_IMAGE, VNF_IMAGE, VNF_SCRIPT, EMS_PLUGIN_PKG, DEVICE_EXTENSION_PKG, BOOT_CFG_IMG, TELEMETRY_AGENT_PKG, TELEMETRY_PLUGIN_PKG, VNFM_PLUGIN_PKG, 'SRX_LICENSE_FILE')
minor_version <i>optional</i>	Minor version. Example : <code>0</code>	integer(int64)
supported_platform <i>optional</i>	Supported platforms is optional. Because it is a list, this form-data field can be given as input multiple times. Example : <code>"string"</code>	string
vendor <i>required</i>	Vendor name. Example : <code>"string"</code>	string

UploadImageFile_OutputType

Name	Description	Schema
failed_list <i>optional</i>	Example : <code>["UploadImageFileOutputFailedListType"]</code>	< UploadImageFileOutputFailedListType > array
imagefile_uri <i>optional</i>	Image file location path where it has been uploaded. Example : <code>"string"</code>	string
imagefile_uuid <i>optional</i>	Image file UUID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
progress <i>optional</i>	A string of dot characters to keep the client session alive during uploading. Example : <code>"string"</code>	string
status <i>optional</i>	The standard error code. Example : <code>"string"</code>	enum (SUCCESS, FAILURE)

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : <code>0</code>	integer(int64)

Name	Description	Schema
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`config-root{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-ims-central_config-root_id_domain"]</code>	<code>< config-root{id}_domain ></code> array
global-system-config <i>optional</i>	Example : <code>["_csp-ims-central_config-root_id_global-system-config"]</code>	<code>< config-root{id}_global-system-config ></code> array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`delete_image-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteImage_InputType"</code>	DeleteImage_InputType

`delete_image-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteImage_OutputType"</code>	DeleteImage_OutputType

`deploy_image-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeployImage_InputType"</code>	DeployImage_InputType

`deploy_image-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeployImage_OutputType"</code>	DeployImage_OutputType

`domain`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-ims-central_domain_id_api-access-list"]</code>	<code>< domain{id}_api-access-list ></code> array
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-ims-central_domain_id_namespace"]</code>	<code>< domain{id}_namespace ></code> array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
project <i>optional</i>	Example : <code>["_csp-ims-central_domain_id_project"]</code>	<code>< domain{id}_project ></code> array

get_imagefileurl-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetImagefileurl_InputType"</code>	GetImagefileurl_InputType

get_imagefileurl-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetImagefileurl_OutputType"</code>	GetImagefileurl_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

install_device_package-input

Name	Description	Schema
input <i>optional</i>	Example : "InstallDevicePackage_InputType"	InstallDevicePackage_InputType

install_device_package-output

Name	Description	Schema
output <i>optional</i>	Example : "InstallDevicePackage_OutputType"	InstallDevicePackage_OutputType

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-ims-central_project_id_api-access-list]"]	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[_csp-ims-central_project_id_namespace]"]	< project{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
quota <i>optional</i>	Example : "QuotaType"	QuotaType

upload_image_file-input

Name	Description	Schema
input <i>optional</i>	Example : "UploadImageFile_InputType"	UploadImageFile_InputType

upload_image_file-output

Name	Description	Schema
output <i>optional</i>	Example : "UploadImageFile_OutputType"	UploadImageFile_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string

Name	Description	Schema
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.8. Inventory Management (Central)

9.8.1. Overview

Data model of CSP inventory management service.

Version information

Version : 3.0

URI scheme

BasePath : /inv-central

Schemes : HTTP

Tags

- acquire-device-resource : Acquire device resource for application.
- release-device-resource : Release device resource for application.
- release-reservation : Synchronous RPC to release one or more resource or property level reservation.
- discover-resource : Asynchronous RPC call to discover resources on the indicated device. The resources types discovered along with their names, properties and relationships are determined by the inventory plugin registered for the device and/or device family.
- reserve-resource : Synchronous RPC to reserve one or more resources.

Produces

- application/json

9.8.2. Resources

Acquire-device-resource

Acquire device resource for application.

Execute acquire-device-resource RPC

```
POST /inv-central/acquire-device-resource
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		acquire-device-resource-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	acquire-device-resource-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/inv-central/acquire-device-resource"
```

Request body

```
{
  "input" : {
    "device" : {
      "fqname" : "string",
      "uuid" : "string",
      "component" : "string"
    },
    "snapshot" : [ {
      "resource_type" : "string",
      "sub_resource_type" : "string",
      "resource_name" : "string",
      "dirty_flag" : true,
      "children" : "string"
    } ],
    "refer_uuid" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "device_resource" : [ {
      "device_resource_uuid" : "string",
      "resource_name" : "string",
      "update_flag" : true
    } ],
    "status" : "string",
    "message" : "string"
  }
}
```

Discover-resource

Asynchronous RPC call to discover resources on the indicated device. The resources types discovered along with their names, properties and relationships are determined by the inventory plugin registered for the device and/or device family.

Execute discover-resource RPC

```
POST /inv-central/discover-resource
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		discover-resource-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	discover-resource-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/inv-central/discover-resource"
```

Request body

```
{
  "input" : {
    "fqname" : "string",
    "uuid" : "string",
    "resource_type" : "string",
    "resource_types" : "string",
    "url" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "request_id" : "string"
  }
}
```

Release-device-resource

Release device resource for application.

Execute release-device-resource RPC

```
POST /inv-central/release-device-resource
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		release-device-resource-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	release-device-resource-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/inv-central/release-device-resource"
```

Request body

```
{
  "input" : {
    "resources" : [ {
      "fqname" : "string",
      "uuid" : "string"
    } ],
    "refer_uuid" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "message" : "string",
    "abstract-config" : "string"
  }
}
```

Release-reservation

Synchronous RPC to release one or more resource or property level reservation.

Execute release-reservation RPC

```
POST /inv-central/release-reservation
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		release-reservation-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	release-reservation-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/inv-central/release-reservation"
```

Request body

```
{
  "input" : {
    "resources" : [ {
      "fqname" : "string",
      "uuid" : "string"
    } ],
    "property" : [ {
      "name" : "string",
      "value" : "string"
    } ],
    "owner" : {
      "owner_id" : "string",
      "owner_type" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "overall_result" : {
      "status" : "string",
      "message" : "string"
    },
    "detailed_result" : [ {
      "resource_name" : "string",
      "resource_id" : "string",
      "property" : {
        "name" : "string",
        "value" : "string"
      },
      "error_data" : {
        "error_code" : "string",
        "error_tag" : "string",
        "error_message" : "string",
        "error_diag" : "string",
        "error_href" : "string"
      }
    } ]
  }
}

```

Reserve-resource

Synchronous RPC to reserve one or more resources.

Execute `reserve-resource` RPC

POST `/inv-central/reserve-resource`

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		reserve-resource-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	reserve-resource-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/inv-central/reserve-resource"
```

Request body

```
{
  "input" : {
    "reservation_scope" : {
      "parent_identifier" : {
        "fqname" : "string",
        "uuid" : "string"
      },
      "resources_identifier" : {
        "fqname" : "string",
        "uuid" : "string"
      },
      "resource_type" : "string",
      "property" : {
        "name" : "string",
        "value" : "string"
      }
    },
    "reservation_type" : "string",
    "owner" : {
      "owner_id" : "string",
      "owner_type" : "string",
      "reservation_expiry_time" : 0
    }
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "overall_result" : {
      "status" : "string",
      "message" : "string"
    },
    "detailed_result" : [ {
      "resource_name" : "string",
      "resource_id" : "string",
      "property" : {
        "name" : "string",
        "value" : "string"
      },
      "error_data" : {
        "error_code" : "string",
        "error_tag" : "string",
        "error_message" : "string",
        "error_diag" : "string",
        "error_href" : "string"
      }
    } ]
  }
}

```

9.8.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string

Name	Description	Schema
rule_uuid <i>optional</i>	Example : <code>"string"</code>	string

AcquireDeviceResourceInputDeviceType

Name	Description	Schema
component <i>optional</i>	Device component. Default : <code>"JUNOS"</code> Example : <code>"string"</code>	string
fqname <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

AcquireDeviceResourceInputSnapshotType

Name	Description	Schema
children <i>optional</i>	The children resources. Example : <code>"string"</code>	string
dirty_flag <i>optional</i>	Dirty flag. Example : <code>true</code>	boolean
resource_name <i>optional</i>	Device resource name. Example : <code>"string"</code>	string
resource_type <i>optional</i>	Common resource type names like Application or Address. Example : <code>"string"</code>	enum (Application, Address, Interface, Zone, RoutingInstance)
sub_resource_type <i>optional</i>	Common resource sub type names for Interface: ifd, ifl, ifsd, or others. Example : <code>"string"</code>	enum (ifd, ifl, ifsp)

AcquireDeviceResourceOutputDeviceResourceType

Name	Description	Schema
device_resource_uuid <i>optional</i>	Device Resource UUID. Example : <code>"string"</code>	string
resource_name <i>optional</i>	Device resource name. Example : <code>"string"</code>	string
update_flag <i>optional</i>	Update flag. Example : <code>true</code>	boolean

AcquireDeviceResource_InputType

Name	Description	Schema
device <i>optional</i>	Example : <code>"AcquireDeviceResourceInputDeviceType"</code>	AcquireDeviceResourceInputDeviceType

Name	Description	Schema
refer_uuid <i>optional</i>	Should be Abstract Config UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
snapshot <i>optional</i>	Example : ["AcquireDeviceResourceInputSnapshotType"]	< AcquireDeviceResourceInputSnapshotType > array

AcquireDeviceResource_OutputType

Name	Description	Schema
device_resource <i>optional</i>	Example : ["AcquireDeviceResourceOutputDeviceResourceType"]	< AcquireDeviceResourceOutputDeviceResourceType > array
message <i>optional</i>	Error/details. Example : "string"	string
status <i>optional</i>	Indicates success/failure. Example : "string"	enum (SUCCESS, FAILURE)

BulkSaveResourcesAsyncInputDeviceType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

BulkSaveResourcesAsyncInputResourceType

Name	Description	Schema
property <i>optional</i>	Example : "ResourcePropertyType"	ResourcePropertyType
related_resources <i>optional</i>	Example : "ResourceRelatedResourcesType"	ResourceRelatedResourcesType
resource_name <i>optional</i>	Resource name. Example : "string"	string
resource_type <i>optional</i>	Resource type. Example : "string"	enum (Application, Address, Interface, Zone, RoutingInstance)

BulkSaveResourcesAsync_InputType

Name	Description	Schema
component <i>optional</i>	Device component. Default : "JUNOS" Example : "string"	string

Name	Description	Schema
device <i>optional</i>	Example : <code>"BulkSaveResourcesAsyncInputDeviceType"</code>	<code>BulkSaveResourcesAsyncInputDeviceType</code>
resource <i>optional</i>	Example : <code>["BulkSaveResourcesAsyncInputResourceType"]</code>	<code>< BulkSaveResourcesAsyncInputResourceType ></code> array
resource_type <i>optional</i>	Common resource type names like interface, routing instances, and others. Example : <code>"string"</code>	string
url <i>required</i>	The URL to be used for reporting the result of discover resource, it is AMQP. Please provide enough info such as exchange name, routing-key and queue name so the message can be sent to the right listener. Example : <code>"string"</code>	string

BulkSaveResourcesAsync_OutputType

Name	Description	Schema
request_id <i>optional</i>	ID for this request. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

BulkSaveResourcesInputDeviceType

Name	Description	Schema
fqname <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

BulkSaveResourcesInputResourceType

Name	Description	Schema
property <i>optional</i>	Example : <code>"ResourcePropertyType"</code>	<code>ResourcePropertyType</code>
related_resources <i>optional</i>	Example : <code>"ResourceRelatedResourcesType"</code>	<code>ResourceRelatedResourcesType</code>
resource_name <i>optional</i>	Resource name. Example : <code>"string"</code>	string
resource_type <i>optional</i>	Resource type. Example : <code>"string"</code>	enum (Application, Address, Interface, Zone, RoutingInstance)

BulkSaveResources_InputType

Name	Description	Schema
device <i>optional</i>	Example : <code>"BulkSaveResourcesInputDeviceType"</code>	<code>BulkSaveResourcesInputDeviceType</code>

Name	Description	Schema
resource <i>optional</i>	Example : ["BulkSaveResourcesInputResourceType"]	< BulkSaveResourcesInputResourceType > array

BulkSaveResources_OutputType

Name	Description	Schema
message <i>optional</i>	Error/details. Example : "string"	string
status <i>optional</i>	Indicates success/failure. Example : "string"	enum (SUCCESS, FAILURE)

DetailedResultErrorDataType

Name	Description	Schema
error_code <i>optional</i>	Unique error code that identifies the error condition detected. Other leaves in this grouping are looked up from error definitions file using this code. This is of the format <ms-name>:<integer-error-code> Example : "string"	string
error_diag <i>optional</i>	A diagnostic message describing probable cause for the error, troubleshooting tips, etc. as defined in the error definitions file. Example : "string"	string
error_href <i>optional</i>	A URL from where details about the error code can be obtained. Example : "string"	string
error_message <i>optional</i>	A detailed message describing the error condition. This is formed from the message in the error definitions file with contextual information filled in. Example : "string"	string
error_tag <i>optional</i>	A short name for the error condition. Example : "string"	string

DetailedResultPropertyType

Name	Description	Schema
name <i>optional</i>	Resource property name. Example : "string"	string
value <i>optional</i>	Resource property value. Example : "string"	string

DiscoverResource_InputType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
resource_type <i>optional</i>	Example : "string"	string
resource_types <i>optional</i>	Example : "string"	string

Name	Description	Schema
url <i>required</i>	The URL to use for reporting the results of resource discovery, in AMQP. Please provide enough info such as exchange name, routing-key and queue name so the message can be sent to the right listener. Example : "string"	string
uuid <i>optional</i>	Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DiscoverResource_ OutputType

Name	Description	Schema
request_id <i>optional</i>	Request ID for this request. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
group_access <i>optional</i>	Example : 0	integer(int32)
other_access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner-access <i>optional</i>	Example : 0	integer(int32)
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : <code>"string"</code>	string
rule_object <i>optional</i>	Example : <code>"string"</code>	string
rule_perms <i>optional</i>	Example : <code>"RbacPermType"</code>	RbacPermType

ReleaseDeviceResourceInputResourcesType

Name	Description	Schema
fqname <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

ReleaseDeviceResource_InputType

Name	Description	Schema
refer_uuid <i>optional</i>	Should be Abstract Config UUID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
resources <i>optional</i>	Example : <code>["ReleaseDeviceResourceInputResourcesType"]</code>	< ReleaseDeviceResourceInputResourcesType > array

ReleaseDeviceResource_OutputType

Name	Description	Schema
abstract-config <i>optional</i>	Abstract Config UUID list. Example : <code>"string"</code>	string
message <i>optional</i>	Error/details. Example : <code>"string"</code>	string
status <i>optional</i>	Indicates success/failure. Example : <code>"string"</code>	enum (SUCCESS, FAILURE)

ReleaseReservationInputOwnerType

Name	Description	Schema
owner_id <i>optional</i>	Unique ID of the object (service) for which this reservation is being released. Example : <code>"string"</code>	string
owner_type <i>optional</i>	Type of the object (service) for which this reservation is being released. Example : <code>"string"</code>	string

ReleaseReservationInputPropertyType

Name	Description	Schema
name <i>optional</i>	Resource property name. Example : "string"	string
value <i>optional</i>	Resource property value. Example : "string"	string

ReleaseReservationInputResourcesType

Name	Description	Schema
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

ReleaseReservationOutputDetailedResultType

Name	Description	Schema
error_data <i>optional</i>	Example : "DetailedResultErrorDataType"	DetailedResultErrorDataType
property <i>optional</i>	Example : "DetailedResultPropertyType"	DetailedResultPropertyType
resource_id <i>optional</i>	UUID of the resource. Example : "string"	string
resource_name <i>optional</i>	Name of the resource. Example : "string"	string

ReleaseReservationOutputOverallResultType

Name	Description	Schema
message <i>optional</i>	Error/details. Example : "string"	string
status <i>optional</i>	Indicates success/failure. Example : "string"	enum (SUCCESS, FAILURE)

ReleaseReservation_InputType

Name	Description	Schema
owner <i>optional</i>	Example : "ReleaseReservationInputOwnerType"	ReleaseReservationInputOwnerType
property <i>optional</i>	Example : ["ReleaseReservationInputPropertyType"]	< ReleaseReservationInputPropertyType > array
resources <i>optional</i>	Example : ["ReleaseReservationInputResourcesType"]	< ReleaseReservationInputResourcesType > array

ReleaseReservation_OutputType

Name	Description	Schema
detailed_result <i>optional</i>	Example : [" ReleaseReservationOutputDetailedResultType "]	< ReleaseReservationOutputDetailedResultType > array
overall_result <i>optional</i>	Example : " ReleaseReservationOutputOverallResultType "	ReleaseReservationOutputOverallResultType

ReservationScopePropertyType

Name	Description	Schema
name <i>optional</i>	Resource property name. Example : " string "	string
value <i>optional</i>	Resource property value. Example : " string "	string

ReserveResourceInputOwnerType

Name	Description	Schema
owner_id <i>optional</i>	A unique identification of the resource owner of this. Example : " string "	string
owner_type <i>optional</i>	Type of the owner. Example : " string "	string
reservation_expiry_time <i>optional</i>	This timestamp indicates when the reservation on this resource by this owner will expire, thus the latest time by which this resource should get provisioned on the device. If absent, it means the reservation remains till it is explicitly released by the client. Example : 0	integer(int32)

ReserveResourceInputReservationScopeParentIdentifierType

Name	Description	Schema
fqname <i>optional</i>	Example : " string "	string
uuid <i>optional</i>	Example : " string "	string

ReserveResourceInputReservationScopeResourcesIdentifierType

Name	Description	Schema
fqname <i>optional</i>	Example : " string "	string
uuid <i>optional</i>	Example : " string "	string

ReserveResourceInputReservationScopeType

Name	Description	Schema
parent_identifier <i>optional</i>	Example : "ReserveResourceInputReservationScopeParentIdentifierType"	ReserveResourceInputReservationScopeParentIdentifierType
property <i>optional</i>	Example : "ReservationScopePropertyType"	ReservationScopePropertyType
resource_type <i>optional</i>	The type of resource that needs to be reserved. Example : "string"	enum (Application, Address, Interface, Zone, RoutingInstance)
resources_identifier <i>optional</i>	Example : "ReserveResourceInputReservationScopeResourcesIdentifierType"	ReserveResourceInputReservationScopeResourcesIdentifierType

ReserveResourceOutputDetailedResultType

Name	Description	Schema
error_data <i>optional</i>	Example : "DetailedResultErrorDataType"	DetailedResultErrorDataType
property <i>optional</i>	Example : "DetailedResultPropertyType"	DetailedResultPropertyType
resource_id <i>optional</i>	UUID of the resource Example : "string"	string
resource_name <i>optional</i>	Name of the resource. Example : "string"	string

ReserveResourceOutputOverallResultType

Name	Description	Schema
message <i>optional</i>	Error/details. Example : "string"	string
status <i>optional</i>	Indicates success/failure. Example : "string"	enum (SUCCESS, FAILURE)

ReserveResource_InputType

Name	Description	Schema
owner <i>optional</i>	Example : "ReserveResourceInputOwnerType"	ReserveResourceInputOwnerType
reservation_scope <i>optional</i>	Example : "ReserveResourceInputReservationScopeType"	ReserveResourceInputReservationScopeType
reservation_type <i>optional</i>	One of four categorical types of reservations for device resources: - Resource needs to be created (not yet existing). - Resource exists but is not reserved. - Resource exists and is reserved by the same owner. - Resource exists and is reserved by another owner (this category is theoretically possible but will never be returned by this API. Default : "REQUIRE_NEW" Example : "string"	enum (REQUIRE_NEW, EXCLUDE_RESERVED, INCLUDE_RESERVED)

ReserveResource_OutputType

Name	Description	Schema
detailed_result <i>optional</i>	Example : ["ReserveResourceOutputDetailedResultType"]	< ReserveResourceOutput DetailedResultType > array
overall_result <i>optional</i>	Example : "ReserveResourceOutputOverallResultType"	ReserveResourceOutput OverallResultType

ResourcePropertyType

Name	Description	Schema
name <i>optional</i>	Property name. Example : "string"	string
value <i>optional</i>	Property value. Example : "string"	string

ResourceRelatedResourcesType

Name	Description	Schema
related_resource_name <i>optional</i>	Name of the related resource. Example : "string"	string
relation_type <i>optional</i>	Type of relationship to resource. Example : "string"	enum (CONTAINMENT, ASSOCIATION)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string
tenant_access <i>optional</i>	Example : 0	integer(int32)

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

`access-control-list{id}`

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : <code>"AclEntriesType"</code>	AclEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`acquire-device-resource-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"AcquireDeviceResource_InputType"</code>	AcquireDeviceResource_InputType

`acquire-device-resource-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"AcquireDeviceResource_OutputType"</code>	AcquireDeviceResource_OutputType

`api-access-list`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`api-access-list{id}`

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : <code>"RbacRuleEntriesType"</code>	RbacRuleEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

bulk-save-resources-async-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"BulkSaveResourcesAsync_InputType"</code>	BulkSaveResourcesAsync_InputType

bulk-save-resources-async-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"BulkSaveResourcesAsync_OutputType"</code>	BulkSaveResourcesAsync_OutputType

bulk-save-resources-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"BulkSaveResources_InputType"</code>	BulkSaveResources_InputType

bulk-save-resources-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"BulkSaveResources_OutputType"</code>	BulkSaveResources_OutputType

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-inv-central_config-root_id_domain"]</code>	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : <code>["_csp-inv-central_config-root_id_global-system-config"]</code>	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

discover-resource-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DiscoverResource_InputType"</code>	<code>DiscoverResource_InputType</code>

discover-resource-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DiscoverResource_OutputType"</code>	<code>DiscoverResource_OutputType</code>

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-inv-central_domain_id_api-access-list"]</code>	<code>< domain{id}_api-access-list > array</code>
display-name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	<code>DomainLimitsType</code>
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>
namespace <i>optional</i>	Example : <code>["_csp-inv-central_domain_id_namespace"]</code>	<code>< domain{id}_namespace > array</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>
project <i>optional</i>	Example : <code>["_csp-inv-central_domain_id_project"]</code>	<code>< domain{id}_project > array</code>

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-inv-central_project_id_api-access-list]"]	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[_csp-inv-central_project_id_namespace]"]	< project{id}_namespace > array

Name	Description	Schema
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
quota <i>optional</i>	Example : <code>"QuotaType"</code>	QuotaType

release-device-resource-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ReleaseDeviceResource_InputType"</code>	ReleaseDeviceResource_InputType

release-device-resource-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ReleaseDeviceResource_OutputType"</code>	ReleaseDeviceResource_OutputType

release-reservation-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ReleaseReservation_InputType"</code>	ReleaseReservation_InputType

release-reservation-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ReleaseReservation_OutputType"</code>	ReleaseReservation_OutputType

reserve-resource-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ReserveResource_InputType"</code>	ReserveResource_InputType

reserve-resource-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ReserveResource_OutputType"</code>	ReserveResource_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.9. Job Service

9.9.1. Overview

APIs to handle job services.

Version information

Version : 3.0

URI scheme

BasePath : /job-service

Schemes : HTTP

Tags

- get-job-complete-percentage : Returns percentage of job completion. When job is in-progress, data is retrieved from znode and after job completion, is retrieved from DB.
- create-job-schedule : RPC used to create a job in the Job Service.
- add-task : Adds tasks to an existing job.
- update-job-results : Updates results of a completed job.
- schedule : Schedule information.
- change-to-simple-job : Convert complex job to simple job after adding all the tasks.
- get-job-complete-percentage-list : Returns a list containing percentage of job completion. When job is in-progress, data is retrieved from znode and after job completion, is retrieved from DB.

- `job` : Job service information.
- `get-task-data` : Returns task data stored in znode, or empty string if znode does not exist or if it contains no data.
- `update-task-status` : Update the task status.
- `create-job` : Creates a job in the Job Service. This operation has 1 second delay due to Elastic Search indexing.

Produces

- `application/json`

9.9.2. Resources

Add-task

Adds tasks to an existing job.

Execute add-task RPC

```
POST /job-service/add-task
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		add-task-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	add-task-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/add-task"
```

Request body

```
{
  "input" : {
    "tasks" : [ {
      "task_path" : "string",
      "task_name" : "string",
      "regional_job" : true,
      "region_name" : "string"
    } ],
    "job_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "result" : "string",
    "error_data" : {
      "error_code" : "string",
      "error_tag" : "string",
      "error_message" : "string",
      "error_diag" : "string",
      "error_href" : "string"
    }
  }
}
```

Change-to-simple-job

Convert complex job to simple job after adding all the tasks.

Execute change-to-simple-job RPC

```
POST /job-service/change-to-simple-job
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		change-to-simple-job-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	change-to-simple-job-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/change-to-simple-job"
```

Request body

```
{
  "input" : {
    "job_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "result" : "string",
    "error_data" : {
      "error_code" : "string",
      "error_tag" : "string",
      "error_message" : "string",
      "error_diag" : "string",
      "error_href" : "string"
    }
  }
}
```

Create-job

Creates a job in the Job Service. This operation has 1 second delay due to Elastic Search indexing.

Execute create-job RPC

POST /job-service/create-job

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		create-job-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	create-job-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/create-job"
```

Request body

```
{
  "input" : {
    "job_name" : "string",
    "job_type" : "string",
    "task_count" : 0,
    "category" : "string",
    "job_timeout" : 0,
    "job_complete_notification_url" : "string",
    "callback_url" : "string",
    "prev_job_id" : "string",
    "monitor_flag" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job-id" : "string",
    "warning" : "string"
  }
}
```

Create-job-schedule

RPC used to create a job in the Job Service.

Execute create-job-schedule RPC

```
POST /job-service/create-job-schedule
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		create-job-schedule-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	create-job-schedule-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/create-job-schedule"
```

Request body

```
{
  "input" : {
    "schedule_name" : "string",
    "description" : "string",
    "record_type" : "string",
    "record_name" : "string",
    "record_fqname" : "string",
    "record_uuid" : "string",
    "next_run_time" : "string",
    "schedule_end_time" : "string",
    "url" : "string",
    "lookup_name" : "string",
    "recurring_crontab" : "string",
    "is_run_now" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string",
    "schedule_id" : "string",
    "status" : "string",
    "error_message" : "string"
  }
}
```

Get-job-complete-percentage

Returns percentage of job completion. When job is in-progress, data is retrieved from znode and after job completion, is retrieved from DB.

Execute get-job-complete-percentage RPC

```
POST /job-service/get-job-complete-percentage
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-job-complete-percentage-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-job-complete-percentage-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/get-job-complete-percentage"
```

Request body

```
{
  "input" : {
    "job_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "percentage" : "string",
    "warning" : "string"
  }
}
```

Get-job-complete-percentage-list

Returns a list containing percentage of job completion. When job is in-progress, data is retrieved from znode and after job completion, is retrieved from DB.

Execute `get-job-complete-percentage-list` RPC

```
POST /job-service/get-job-complete-percentage-list
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-job-complete-percentage-list-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-job-complete-percentage-list-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/get-job-complete-percentage-list"
```

Request body

```
{
  "input" : {
    "job_ids" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "percentage_list" : [ {
      "job_id" : "string",
      "percentage" : "string",
      "warning" : "string"
    } ]
  }
}
```

Get-task-data

Returns task data stored in znode, or empty string if znode does not exist or if it contains no data.

Execute get-task-data RPC

```
POST /job-service/get-task-data
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-task-data-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-task-data-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/get-task-data"
```

Request body

```
{
  "input" : {
    "job_id" : "string",
    "task_path" : "string"
  }
}
```

Example HTTP response

Response 200


```
{
  "output" : {
    "task_data" : "string",
    "warning" : "string"
  }
}
```

Job

Job service information.

Add a new job

```
POST /job-service/job
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		job{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	job{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/job"
```

Request body

```

{
  "description" : "string",
  "job_type" : "string",
  "start_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "end_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "status" : { },
  "job_complete_notification_url" : "string",
  "summary" : {
    "task_count" : 0,
    "success_count" : 0,
    "fail_count" : 0
  },
  "results" : "<<_csp-job-service_xsd_any>>",
  "detailed_results" : { },
  "meta_information" : {
    "tenant_id" : "string",
    "user_id" : "string"
  },
  "task_count" : "<<_csp-job-service_xsd_unsignedlong>>",
  "category" : { },
  "callback_payload" : "<<_csp-job-service_xsd_any>>",
  "callback_url" : "string",
  "percentage" : "<<_csp-job-service_xsd_unsignedlong>>",
  "record_type" : "string",
  "record_name" : "string",
  "record_fqname" : "string",
  "record_uuid" : "string",
  "prev_job_id" : { },
  "monitor_flag" : "<<_csp-job-service_xsd_boolean>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {

```

```

    "owner" : "string",
    "share" : [ {
        "tenant" : "string"
    } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "description" : "string",
  "job_type" : "string",
  "start_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "end_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "status" : { },
  "job_complete_notification_url" : "string",
  "summary" : {
    "task_count" : 0,
    "success_count" : 0,
    "fail_count" : 0
  },
  "results" : "<<_csp-job-service_xsd_any>>",
  "detailed_results" : { },
  "meta_information" : {
    "tenant_id" : "string",
    "user_id" : "string"
  },
  "task_count" : "<<_csp-job-service_xsd_unsignedlong>>",
  "category" : { },
  "callback_payload" : "<<_csp-job-service_xsd_any>>",
  "callback_url" : "string",
  "percentage" : "<<_csp-job-service_xsd_unsignedlong>>",
  "record_type" : "string",
  "record_name" : "string",
  "record_fqname" : "string",
  "record_uuid" : "string",
  "prev_job_id" : { },
  "monitor_flag" : "<<_csp-job-service_xsd_boolean>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {

```

```
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "share" : [ {
    "tenant" : "string"
  } ]
},
"display-name" : "string"
}
```

Get the job list

```
GET /job-service/job
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< job > array

Example HTTP request

Request path

```
"/job-service/job"
```

Example HTTP response

Response 200

```
"array"
```

Get a single job

```
GET /job-service/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	job{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/job/0"
```

Example HTTP response

Response 200

```
{
  "description" : "string",
  "job_type" : "string",
  "start_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "end_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "status" : { },
  "job_complete_notification_url" : "string",
  "summary" : {
    "task_count" : 0,
    "success_count" : 0,
    "fail_count" : 0
  },
  "results" : "<<_csp-job-service_xsd_any>>",
  "detailed_results" : { },
  "meta_information" : {
    "tenant_id" : "string",
    "user_id" : "string"
  }
}
```

```
  },
  "task_count" : "<<_csp-job-service_xsd_unsignedlong>>",
  "category" : { },
  "callback_payload" : "<<_csp-job-service_xsd_any>>",
  "callback_url" : "string",
  "percentage" : "<<_csp-job-service_xsd_unsignedlong>>",
  "record_type" : "string",
  "record_name" : "string",
  "record_fqname" : "string",
  "record_uuid" : "string",
  "prev_job_id" : { },
  "monitor_flag" : "<<_csp-job-service_xsd_boolean>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Update job information

```
PUT /job-service/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	job{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/job/0"
```

Example HTTP response

Response 200

```
{
  "description" : "string",
  "job_type" : "string",
  "start_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "end_time" : "<<_csp-job-service_xsd_unsignedlong>>",
  "status" : { },
  "job_complete_notification_url" : "string",
  "summary" : {
    "task_count" : 0,
    "success_count" : 0,
    "fail_count" : 0
  },
  "results" : "<<_csp-job-service_xsd_any>>",
  "detailed_results" : { },
  "meta_information" : {
    "tenant_id" : "string",
    "user_id" : "string"
  },
  "task_count" : "<<_csp-job-service_xsd_unsignedlong>>",
  "category" : { },
  "callback_payload" : "<<_csp-job-service_xsd_any>>",
  "callback_url" : "string",
```

```
"percentage" : "<<_csp-job-service_xsd_unsignedlong>>",
"record_type" : "string",
"record_name" : "string",
"record_fqname" : "string",
"record_uuid" : "string",
"prev_job_id" : { },
"monitor_flag" : "<<_csp-job-service_xsd_boolean>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "group" : "string"
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "share" : [ {
    "tenant" : "string"
  } ]
},
"display-name" : "string"
}
```

Delete a single job

```
DELETE /job-service/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/job/0"
```

Schedule

Schedule information.

Add a new schedule

```
POST /job-service/schedule
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>schedule{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>schedule{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/schedule"
```

Request body

```

{
  "description" : "string",
  "next_run_time" : { },
  "schedule_end_time" : { },
  "status" : { },
  "payload" : "<<_csp-job-service_xsd_any>>",
  "url" : "string",
  "lookup_name" : "string",
  "recurring_crontab" : "string",
  "schedule_summary" : "string",
  "trust_id" : "string",
  "record_type" : "string",
  "record_name" : "string",
  "record_fqname" : "string",
  "record_uuid" : "string",
  "error_message" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "job" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "description" : "string",
  "next_run_time" : { },
  "schedule_end_time" : { },
  "status" : { },
  "payload" : "<<_csp-job-service_xsd_any>>",
  "url" : "string",
  "lookup_name" : "string",
  "recurring_crontab" : "string",
  "schedule_summary" : "string",
  "trust_id" : "string",
  "record_type" : "string",
  "record_name" : "string",
  "record_fqname" : "string",
  "record_uuid" : "string",
  "error_message" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "job" : [ null ]
}

```

Get the schedule list

```
GET /job-service/schedule
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< schedule > array

Example HTTP request

Request path

```
"/job-service/schedule"
```

Example HTTP response

Response 200

```
"array"
```

Get a single schedule

```
GET /job-service/schedule/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	schedule{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/schedule/0"
```

Example HTTP response

Response 200

```

{
  "description" : "string",
  "next_run_time" : { },
  "schedule_end_time" : { },
  "status" : { },
  "payload" : "<<_csp-job-service_xsd_any>>",
  "url" : "string",
  "lookup_name" : "string",
  "recurring_crontab" : "string",
  "schedule_summary" : "string",
  "trust_id" : "string",
  "record_type" : "string",
  "record_name" : "string",
  "record_fqname" : "string",
  "record_uuid" : "string",
  "error_message" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "job" : [ null ]
}

```

Update schedule information

```
PUT /job-service/schedule/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	schedule{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/schedule/0"
```

Example HTTP response

Response 200


```

{
  "description" : "string",
  "next_run_time" : { },
  "schedule_end_time" : { },
  "status" : { },
  "payload" : "<<_csp-job-service_xsd_any>>",
  "url" : "string",
  "lookup_name" : "string",
  "recurring_crontab" : "string",
  "schedule_summary" : "string",
  "trust_id" : "string",
  "record_type" : "string",
  "record_name" : "string",
  "record_fqname" : "string",
  "record_uuid" : "string",
  "error_message" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "job" : [ null ]
}

```

Delete a single schedule

```
DELETE /job-service/schedule/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/schedule/0"
```

Update-job-results

Updates results of a completed job.

Execute update-job-results RPC

```
POST /job-service/update-job-results
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		update-job-results-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	update-job-results-output
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/job-service/update-job-results"
```

Request body

```
{
  "input" : {
    "job_id" : "string",
    "results" : "string",
    "detailed_results" : "string",
    "status" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "result" : "string"
  }
}
```

Update-task-status

Update the task status.

Execute update-task-status RPC

POST /job-service/update-task-status

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		update-task-status-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	update-task-status-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/job-service/update-task-status"

Request body

```
{
  "input" : {
    "job_id" : "string",
    "tasks" : [ {
      "task_path" : "string",
      "status" : "string",
      "task_weightage_percentage" : 0,
      "task_tmp_data" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "result" : "string",
    "error_data" : {
      "error_code" : "string",
      "error_tag" : "string",
      "error_message" : "string",
      "error_diag" : "string",
      "error_href" : "string"
    }
  }
}
```

9.9.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

AddTaskInputTasksType

Name	Description	Schema
region_name <i>optional</i>	Name of the region to which this task belongs. Example : "string"	string
regional_job <i>optional</i>	True if this task is a regional job. Example : true	boolean
task_name <i>optional</i>	Task name for display in the UI. If not provided, it is empty string Example : "string"	string

Name	Description	Schema
task_path <i>optional</i>	Task path. For simple jobs, the task UUID. For complex (multi-level) tasks, use the form parent_task/task. Example : <code>"string"</code>	string

AddTaskOutputErrorDataType

Name	Description	Schema
error_code <i>optional</i>	Unique error code that identifies the error condition detected. Other leaves in this grouping are looked up from error definitions file using this code. This is of the format <ms-name>:<integer-error-code> Example : <code>"string"</code>	string
error_diag <i>optional</i>	A diagnostic message describing probable cause for the error, troubleshooting tips, etc. as defined in the error definitions file. Example : <code>"string"</code>	string
error_href <i>optional</i>	A URL from where details about the error code can be obtained. Example : <code>"string"</code>	string
error_message <i>optional</i>	A detailed message describing the error condition. This is formed from the message in the error definitions file with contextual information filled in. Example : <code>"string"</code>	string
error_tag <i>optional</i>	A short name for the error condition. Example : <code>"string"</code>	string

AddTask_InputType

Name	Description	Schema
job_id <i>required</i>	ID of the job ID to which the task belongs. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
tasks <i>optional</i>	Example : <code>["AddTaskInputTasksType"]</code>	< AddTaskInputTasksType > array

AddTask_OutputType

Name	Description	Schema
error_data <i>optional</i>	Example : <code>"AddTaskOutputErrorDataType"</code>	AddTaskOutputErrorDataType
result <i>optional</i>	Response related to the RPC request. Example : <code>"string"</code>	enum (success, failed)

CategoryType

Category to which a job belongs.

Type : string

ChangeToSimpleJobOutputErrorDataType

Name	Description	Schema
error_code <i>optional</i>	Unique error code that identifies the error condition detected. Other leaves in this grouping are looked up from error definitions file using this code. This is of the format <ms-name>:<integer-error-code> Example : "string"	string
error_diag <i>optional</i>	A diagnostic message describing probable cause for the error, troubleshooting tips, etc. as defined in the error definitions file. Example : "string"	string
error_href <i>optional</i>	A URL from where details about the error code can be obtained. Example : "string"	string
error_message <i>optional</i>	A detailed message describing the error condition. This is formed from the message in the error definitions file with contextual information filled in. Example : "string"	string
error_tag <i>optional</i>	A short name for the error condition. Example : "string"	string

ChangeToSimpleJob_InputType

Name	Description	Schema
job_id <i>required</i>	Job ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ChangeToSimpleJob_OutputType

Name	Description	Schema
error_data <i>optional</i>	Example : "ChangeToSimpleJobOutputErrorDataType"	ChangeToSimpleJobOutputErrorDataType
result <i>optional</i>	Response result of the RPC. Example : "string"	enum (success, failed)

CreateJobSchedule_InputType

Name	Description	Schema
description <i>optional</i>	Description of the scheduled job. Example : "string"	string
is_run_now <i>optional</i>	If set to true, the micro-service specified in the URL is called immediately and the job ID is returned in the output. Example : true	boolean
lookup_name <i>optional</i>	Service lookup name. Example : "string"	string
next_run_time <i>optional</i>	Timestamp of next job run time in UTC time with TZ format like 2017-05-15T23:45:50Z. Pattern : "\\d{4}-\\d{2}-\\d{2}T\\d{2}:\\d{2}:\\d{2}(\\.\\d+)?(Z \\+ \\-)\\d{2}:\\d{2}" Example : "string"	string

Name	Description	Schema
record_fqname <i>optional</i>	Job's record_fqname in UI. Example : "string"	string
record_name <i>optional</i>	Job's record name in UI. Example : "string"	string
record_type <i>optional</i>	Record type of the scheduled job from UI. Example : "string"	string
record_uuid <i>optional</i>	Job's record_uuid in UI. Example : "string"	string
recurring_cron tab <i>optional</i>	Recurring schedule in crontab format (currently not supported). Example : "string"	string
schedule_end _time <i>optional</i>	Timestamp of job end time for recurring jobs in UTC time with TZ format like 2017-05-15T23:45:50Z (currently not supported). Pattern : "\\d{4}-\\d{2}-\\d{2}T\\d{2}:\\d{2}:\\d{2}(\\.\\d+)?(Z \\+ \\-]\\d{2}:\\d{2})" Example : "string"	string
schedule_name <i>required</i>	Name of the scheduled job. Example : "string"	string
url <i>required</i>	URL path to call. Example : "string"	string

CreateJobSchedule_OutputType

Name	Description	Schema
error_message <i>optional</i>	Error message generated when a microservice is scheduled to run immediately but returns an error. Example : "string"	string
job_id <i>optional</i>	Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
schedule_id <i>optional</i>	Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
status <i>optional</i>	Status of scheduled job; scheduled or failed. Example : "string"	enum (scheduled, success, failed, in-progress)

CreateJob_InputType

Name	Description	Schema
callback_url <i>optional</i>	URL path for client MS to use. Example : "string"	string
category <i>required</i>	Type of job based on which a job progress is updated differently. Example : "string"	string
job_complete_notification_url <i>optional</i>	The AMQP URL to which the notification will be sent upon job completion. Example : "string"	string

Name	Description	Schema
job_name <i>required</i>	A unique name for the job. Example : "string"	string
job_timeout <i>optional</i>	Maximum amount of time for job in-progress state, given in minutes. Default is 720. Example : 0	integer(int32)
job_type <i>required</i>	Job type to distinguish different jobs. Example : "string"	string
monitor_flag <i>optional</i>	If this flag is set to false, then job monitor will not update the Job status in DB when the job completes and microservice needs to call the update_job_results rpc explicitly to update the job status manually. Example : true	boolean
prev_job_id <i>optional</i>	In case of job rerun, this field stores the previous ran job_id. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
task_count <i>optional</i>	Number of tasks into which the job has been divided. Is mandatory if category is simple. Example : 0	integer(int32)

CreateJob_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job UUID. Example : "string"	string
warning <i>optional</i>	Warnings, if any, from server. Example : "string"	string

DateAndTimeType

Timestamp of job end time in UTC time with TZ format like 2017-05-15T23:45:50Z.

Type : string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

GetJobCompletePercentageListOutputPercentageListType

Name	Description	Schema
job_id <i>optional</i>	Job ID. Example : "string"	string
percentage <i>optional</i>	Returns percentage of job completion. Example : "string"	string
warning <i>optional</i>	Warnings, if any, from server. Example : "string"	string

GetJobCompletePercentageList_InputType

Name	Description	Schema
job_ids <i>optional</i>	List of job_id. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetJobCompletePercentageList_OutputType

Name	Description	Schema
percentage_list <i>optional</i>	Example : ["GetJobCompletePercentageListOutputPercentageListType"]	< GetJobCompletePercentageListOutputPercentageListType > array

GetJobCompletePercentage_InputType

Name	Description	Schema
job_id <i>required</i>	Job ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetJobCompletePercentage_OutputType

Name	Description	Schema
percentage <i>optional</i>	Returns job percentage. Example : "string"	string
warning <i>optional</i>	Warnings, if any, from server. Example : "string"	string

GetTaskData_InputType

Name	Description	Schema
job_id <i>required</i>	Job ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
task_path <i>required</i>	Path of a task. Example : "string"	string

GetTaskData_OutputType

Name	Description	Schema
task_data <i>optional</i>	Returns task data stored in znode. Example : "string"	string
warning <i>optional</i>	Warnings, if any exists, from server. Example : "string"	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

JobMetalInformationType

Name	Description	Schema
tenant_id <i>optional</i>	Tenant UUID of the job. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
user_id <i>optional</i>	User that initiated this job. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

JobSummaryType

Name	Description	Schema
fail_count <i>optional</i>	Total number of failed tasks. Example : 0	integer(int32)
success_count <i>optional</i>	Total number of successful tasks. Example : 0	integer(int32)
task_count <i>optional</i>	Total number of tasks. Example : 0	integer(int32)

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
owner <i>optional</i>	Example : "string"	string

PermType2

Name	Description	Schema
owner <i>optional</i>	Example : "string"	string
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string
rule_object <i>optional</i>	Example : "string"	string

Name	Description	Schema
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

ScheduleStatusType

Current schedule status: - scheduled - inprogress - complete - failed.

Type : enum (scheduled, success, failed, in-progress)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string

TaskStatusType

Current job status.

Type : enum (unknown, success, failed, in-progress)

UpdateJobResults_InputType

Name	Description	Schema
detailed_results <i>optional</i>	URL for detailed results of the specified job. Example : "string"	string
job_id <i>required</i>	Job ID for job to which the task belongs. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
results <i>required</i>	Any additional summarized results for a job. Example : "string"	string
status <i>optional</i>	Status of the job after completion. Example : "string"	enum (unknown, success, failed, in-progress)

UpdateJobResults_OutputType

Name	Description	Schema
result <i>optional</i>	Response of the RPC output. Example : "string"	enum (success, failed)

UpdateTaskStatusInputTasksType

Name	Description	Schema
status <i>optional</i>	Task status. Example : "string"	enum (unknown, success, failed, in-progress)

Name	Description	Schema
task_path <i>optional</i>	Task ID. Example : <code>"string"</code>	string
task_tmp_data <i>optional</i>	A temporary task data that will be stored in znode. Each znode can store at most 1MB of data. Example : <code>"string"</code>	string
task_weightage_percentage <i>optional</i>	Update the task weightage as related to percentage completion. Example : <code>0</code>	integer(int32)

UpdateTaskStatusOutputErrorDataType

Name	Description	Schema
error_code <i>optional</i>	Unique error code that identifies the error condition detected. Other leaves in this grouping are looked up from error definitions file using this code. This is of the format <ms-name>:<integer-error-code> Example : <code>"string"</code>	string
error_diag <i>optional</i>	A diagnostic message describing probable cause for the error, troubleshooting tips, etc. as defined in the error definitions file. Example : <code>"string"</code>	string
error_href <i>optional</i>	A URL from where details about the error code can be obtained. Example : <code>"string"</code>	string
error_message <i>optional</i>	A detailed message describing the error condition. This is formed from the message in the error definitions file with contextual information filled in. Example : <code>"string"</code>	string
error_tag <i>optional</i>	A short name for the error condition. Example : <code>"string"</code>	string

UpdateTaskStatus_InputType

Name	Description	Schema
job_id <i>required</i>	Job ID to which the task belongs. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
tasks <i>optional</i>	Example : <code>["UpdateTaskStatusInputTasksType"]</code>	< UpdateTaskStatusInputTasksType > array

UpdateTaskStatus_OutputType

Name	Description	Schema
error_data <i>optional</i>	Example : <code>"UpdateTaskStatusOutputErrorDataType"</code>	UpdateTaskStatusOutputErrorDataType
result <i>optional</i>	Response result of the RPC. Example : <code>"string"</code>	enum (success, failed)

UriType

URL for detailed results (if job type supports this).

Type : string

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

YangUuidType

In case of job rerun, this field stores the previous ran job_id.

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

add-task-input

Name	Description	Schema
input <i>optional</i>	Example : "AddTask_InputType"	AddTask_InputType

add-task-output

Name	Description	Schema
output <i>optional</i>	Example : "AddTask_OutputType"	AddTask_OutputType

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

change-to-simple-job-input

Name	Description	Schema
input <i>optional</i>	Example : "ChangeToSimpleJob_InputType"	ChangeToSimpleJob_InputType

change-to-simple-job-output

Name	Description	Schema
output <i>optional</i>	Example : "ChangeToSimpleJob_OutputType"	ChangeToSimpleJob_OutputType

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-job-service_config-root_id_domain"]</code>	<code>< config-root{id}_domain ></code> array
global-system-config <i>optional</i>	Example : <code>["_csp-job-service_config-root_id_global-system-config"]</code>	<code>< config-root{id}_global-system-config ></code> array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

create-job-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateJob_InputType"</code>	CreateJob_InputType

create-job-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateJob_OutputType"</code>	CreateJob_OutputType

create-job-schedule-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"CreateJobSchedule_InputType"</code>	CreateJobSchedule_InputType

create-job-schedule-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"CreateJobSchedule_OutputType"</code>	CreateJobSchedule_OutputType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[csp-job-service_domain_id_api-access-list]"]	< domain{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
domain-limits <i>optional</i>	Example : "DomainLimitsType"	DomainLimitsType
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[csp-job-service_domain_id_namespace]"]	< domain{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
project <i>optional</i>	Example : ["[csp-job-service_domain_id_project]"]	< domain{id}_project > array

get-job-complete-percentage-input

Name	Description	Schema
input <i>optional</i>	Example : "GetJobCompletePercentage_InputType"	GetJobCompletePercentage_InputType

get-job-complete-percentage-list-input

Name	Description	Schema
input <i>optional</i>	Example : "GetJobCompletePercentageList_InputType"	GetJobCompletePercentageList_InputType

get-job-complete-percentage-list-output

Name	Description	Schema
output <i>optional</i>	Example : "GetJobCompletePercentageList_OutputType"	GetJobCompletePercentageList_OutputType

get-job-complete-percentage-output

Name	Description	Schema
output <i>optional</i>	Example : "GetJobCompletePercentage_OutputType"	GetJobCompletePercentage_OutputType

get-task-data-input

Name	Description	Schema
input <i>optional</i>	Example : "GetTaskData_InputType"	GetTaskData_InputType

get-task-data-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetTaskData_OutputType"</code>	GetTaskData_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : <code>"string"</code>	string
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

job

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

job{id}

Name	Description	Schema
callback_payload <i>optional</i>	Payload for client MS to use. Example : <code>"[_csp-job-service_xsd_any]"</code>	xsd:any
callback_url <i>optional</i>	URL path to use for client MS. Example : <code>"string"</code>	string
category <i>optional</i>	Category to which a job belongs. Example : <code>"CategoryType"</code>	CategoryType
description <i>optional</i>	Description of the job Example : <code>"string"</code>	string
detailed_results <i>optional</i>	URL for detailed results (if job type supports this). Example : <code>"UriType"</code>	UriType

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
end_time <i>optional</i>	Timestamp of job end time. Example : <code>"[_csp-job-service_xsd_unsignedlong]"</code>	xsd:unsignedLong
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
job_complete_notification_url <i>optional</i>	AMQP URL to which the notifications will be published on job completion. Example : <code>"string"</code>	string
job_type <i>optional</i>	Job type to define unique jobs in CSP. Example : <code>"string"</code>	string
meta_information <i>optional</i>	Meta information of the job. Example : <code>"JobMetaInformationType"</code>	JobMetaInformationType
monitor_flag <i>optional</i>	If this flag is set to false, then job monitor will not update the Job status in DB when the job completes and microservice should call the update_job_results rpc explicitly to update the job status manually. Example : <code>"[_csp-job-service_xsd_boolean]"</code>	xsd:boolean
percentage <i>optional</i>	Percentage of the job completed. Example : <code>"[_csp-job-service_xsd_unsignedlong]"</code>	xsd:unsignedLong
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
prev_job_id <i>optional</i>	In case of job rerun, this field stores the previous ran job_id. Example : <code>"YangUuidType"</code>	YangUuidType
record_fqname <i>optional</i>	Job's record_fqname in UI. Example : <code>"string"</code>	string
record_name <i>optional</i>	Job's record name in UI. Example : <code>"string"</code>	string
record_type <i>optional</i>	Record type of job from UI. Example : <code>"string"</code>	string
record_uuid <i>optional</i>	Job's record_uuid in UI Example : <code>"string"</code>	string
results <i>optional</i>	Final results string that service can supply. Example : <code>"[_csp-job-service_xsd_any]"</code>	xsd:any
start_time <i>optional</i>	Timestamp of job start time. Example : <code>"[_csp-job-service_xsd_unsignedlong]"</code>	xsd:unsignedLong
status <i>optional</i>	Current job status. Example : <code>"TaskStatusType"</code>	TaskStatusType
summary <i>optional</i>	Final result summary. Example : <code>"JobSummaryType"</code>	JobSummaryType
task_count <i>optional</i>	If a simple job type, number of first level tasks over which this job is distributed. Example : <code>"[_csp-job-service_xsd_unsignedlong]"</code>	xsd:unsignedLong

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-job-service_project_id_api-access-list]"]	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
job <i>optional</i>	Example : ["[_csp-job-service_project_id_job]"]	< project{id}_job > array
namespace <i>optional</i>	Example : ["[_csp-job-service_project_id_namespace]"]	< project{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
quota <i>optional</i>	Example : "QuotaType"	QuotaType
schedule <i>optional</i>	Example : ["[_csp-job-service_project_id_schedule]"]	< project{id}_schedule > array

schedule

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

schedule{id}

Name	Description	Schema
description <i>optional</i>	Description of the scheduled job. Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
error_message <i>optional</i>	Error message if the job could not be scheduled. This schedule will not re-run. Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
job <i>optional</i>	Example : ["[_csp-job-service_schedule_id_job]"]	< schedule{id}_job > array
lookup_name <i>optional</i>	Service lookup name. Example : "string"	string
next_run_time <i>optional</i>	Timestamp of next job run time in UTC time with TZ format like 2017-05-15T23:45:50Z. Example : "DateAndTimeType"	DateAndTimeType
payload <i>optional</i>	Payload to trigger the job. Example : "[_csp-job-service_xsd_any]"	xsd:any
perms2 <i>optional</i>	Example : "PermType2"	PermType2
record_fqname <i>optional</i>	Job's record_fqname in UI. Example : "string"	string
record_name <i>optional</i>	Job's record name in UI. Example : "string"	string
record_type <i>optional</i>	Job record type of the scheduled job from UI. Example : "string"	string
record_uuid <i>optional</i>	Job's record_uuid in UI. Example : "string"	string
recurring_crontab <i>optional</i>	Recurring schedule in crontab format. Example : "string"	string
schedule_end_time <i>optional</i>	Timestamp of job end time in UTC time with TZ format like 2017-05-15T23:45:50Z. Example : "DateAndTimeType"	DateAndTimeType
schedule_summary <i>optional</i>	Summary of the schedule information. Example : "string"	string

Name	Description	Schema
status <i>optional</i>	Current schedule status: - scheduled - inprogress - complete - failed. Example : " ScheduleStatusType "	ScheduleStatusType
trust_id <i>optional</i>	UUID of the trust_id. This ID is generated by job-service. Example : " string "	string
url <i>optional</i>	URL path to call. Example : " string "	string

[update-job-results-input](#)

Name	Description	Schema
input <i>optional</i>	Example : " UpdateJobResults_InputType "	UpdateJobResults_InputType

[update-job-results-output](#)

Name	Description	Schema
output <i>optional</i>	Example : " UpdateJobResults_OutputType "	UpdateJobResults_OutputType

[update-task-status-input](#)

Name	Description	Schema
input <i>optional</i>	Example : " UpdateTaskStatus_InputType "	UpdateTaskStatus_InputType

[update-task-status-output](#)

Name	Description	Schema
output <i>optional</i>	Example : " UpdateTaskStatus_OutputType "	UpdateTaskStatus_OutputType

[yang-schema](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : " string "	string
uuid <i>optional</i>	Example : " string "	string

[yang-schema{id}](#)

Name	Description	Schema
display-name <i>optional</i>	Example : " string "	string
es-schema <i>optional</i>	Example : " string "	string

Name	Description	Schema
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.10. Intent-based Policy Management

9.10.1. Overview

APIs for managing and deploying CSO Policies.

Version information

Version : 3.0

URI scheme

BasePath : /policy-mgmt

Schemes : HTTP

Tags

- operational_info : Operational info.
- intent_policy : list of policies.
- policy_meta_info : Policy meta information.
- policy_snapshot : List of policy_snapshot created during policy deployment.
- policy_diff : Policy diff.
- deploy-policy : Deploy policy to all sites. If the policy is not dirty, this API returns 'success' without a job_uuid.
- move-rule : Move an existing rule after another rule. To make the API idempotent, read the policy record and do the following: 1) Update rule.rule_order JSON blob with the newly inserted rule. If the rule is inserted before another rule, update the rule.seq for all the rules after the inserted rule. 2) Update rule.last_update_timestamp with current time.
- device_snapshot_info : Snapshot info for policy per device.
- cancel-deployment : Cancel the associated policy.
- policy_rule : list of rules

- `device_info` : List of device info generated as part of deployment.
- `get-rules-summary` : Gets the rules summary for a site.
- `object_info` : `object_info.name` attribute needs to be the same as the `object_info.object_uuid`. This is important as we can efficiently query the `object_info` from object's UUID using HAPI FQ name query. For object that does not support UUID, like SD object, we generate UUID from DB table name and DB record primary key using `uuid.uuid3()` API. See <https://docs.python.org/2/library/uuid.html#uuid.uuid3> for details.
- `get-dirty-policies` : Returns a list of dirty policies with changes not yet deployed to the relevant devices, or if `policy_uuid` is passed and policy is dirty, returns the specific policy.
- `deployment_info` : Deployment info.
- `delete-rule` : Deletes an existing rule from a policy. To make the API idempotent, the implementation of this API persists the rule using the following steps: 1) Reads the policy record and a) Updates `rule.rule_order` JSON blob with deleted rule. You must update the `rule.seq` for all the rules after the deleted rule. b) Updates `rule.last_update_timestamp` with current time. 2) Delete the rule objects.
- `add-rule` : Add a new rule at specified location. To make the API idempotent, the implementation of this API persists the rule in following steps: 1) Creates a `policy_rule` object from the input payload. The rule name needs to be idempotent. One way to ensure idempotency is to use `rule.creation_timestamp` as the rule name. 2) Add the rule as child object of the policy if the rule does not exist with the same idempotent rule name in the same policy. If rule already exists with the same name, it means the last `add-rule` failed somehow and did not complete the operation. So instead of adding the rule to the policy, we need to update the rule. 3) For each object referenced in the rule, you should add `object_info` if it does not exist. NOTE: Check the `object_info`'s existence by FQ name query of the `object_info` table with object's UUID as the `object_info`'s name. Do nothing if the object exists. 4) Add `object_info uuid` to `rule.object_info_refs` (the ref-edge between the rule and the `object_info`). 5) Read the policy record and a) Updates `rule.rule_order` JSON blob with newly inserted rule. If the rule is inserted before another rule, the `rule.seq` needs to be updated for all the rules after the inserted rule. b) Updates `rule.last_update_timestamp` with current update time.
- `object_meta_info` : Object type info.
- `update-rule` : Update an existing rule with new rule info. To make the API idempotent, the implementation of this API persists the rule using the following steps: 1) Retrieves the rule from DB and compare it with the rule info from the API payload. For those objects that are no longer referenced in the rule, you should remove them from the `rule.object_info_refs`. For those objects that are newly referenced by the rule, you should check the `object_info`'s existence by querying the `object_info` table with the object's UUID (the `object_info`'s UUID is the same as the object's UUID). If object exists, simply add the object UUID to the `rule.object_info_refs` list. Otherwise, add `object_info` to the `object_info` table first before adding it to the `rule.object_info_refs`. 2) Updates the rule with the rule info from the API payload. 3) Updates the `policy.last_update_timestamp` with current update time.
- `get-effective-rules` : Retrieve all effective rules of a policy.

Produces

- `application/json`

9.10.2. Resources

Add-rule

Add a new rule at specified location. To make the API idempotent, the implementation of this API persists the rule in following steps: 1) Creates a `policy_rule` object from the input payload. The rule name needs to be idempotent. One way to ensure idempotency is to use `rule.creation_timestamp` as the rule name. 2) Add the rule as child object of the policy if the rule does not exist with the same idempotent rule name in the

same policy. If rule already exists with the same name, it means the last add-rule failed somehow and did not complete the operation. So instead of adding the rule to the policy, we need to update the rule. 3) For each object referenced in the rule, you should add object_info if it does not exist. NOTE: Check the object_info's existence by FQ name query of the object_info table with object's UUID as the object_info's name. Do nothing if the object exists. 4) Adds object_info uuid to rule.object_info_refs (the ref-edge between the rule and the object_info). 5) Read the policy record and a) Updates rule.rule_order JSON blob with newly inserted rule. If the rule is inserted before another rule, the rule.seq needs to be updated for all the rules after the inserted rule. b) Updates rule.last_update_timestamp with current update time.

Execute add-rule RPC

```
POST /policy-mgmt/add-rule
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		add-rule-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	add-rule-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/add-rule"
```

Request body

```

{
  "input" : {
    "policy_uuid" : "string",
    "rule" : {
      "action" : "string",
      "sla_profile" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "creation_timestamp" : 0,
      "rule_name" : "string",
      "src_endpoints" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "dst_endpoints" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "options" : {
        "logging" : {
          "enable" : true
        },
        "scheduler" : {
          "object_type" : "string",
          "object_name" : "string",
          "object_uuid" : "string",
          "last_update_timestamp" : 0,
          "update_number" : 0
        }
      },
      "rule_description" : "string"
    },
    "insert_before_rule" : "string"
  }
}

```

Example HTTP response

Response 200

```
{
  "output" : {
    "rule_uuid" : "string"
  }
}
```

Cancel-deployment

Cancel the associated policy.

Execute `cancel-deployment` RPC

```
POST /policy-mgmt/cancel-deployment
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		cancel-deployment-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	cancel-deployment-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/cancel-deployment"
```

Request body

```
{
  "input" : {
    "policy_uuid" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

Delete-rule

Deletes an existing rule from a policy. To make the API idempotent, the implementation of this API persists the rule using the following steps: 1) Reads the policy record and a) Updates rule.rule_order JSON blob with deleted rule. You must updated the rule.seq for all the rules after the deleted rule. b) Updates rule.last_update_timestamp with current time. 2) Delete the rule objects.

Execute delete-rule RPC

```
POST /policy-mgmt/delete-rule
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		delete-rule-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	delete-rule-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/delete-rule"
```

Request body

```
{
  "input" : {
    "rule_uuids" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

Deploy-policy

Deploy policy to all sites. If the policy is not dirty, this API returns 'success' without a job_uuid.

Execute deploy-policy RPC

```
POST /policy-mgmt/deploy-policy
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		deploy-policy-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	deploy-policy-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/deploy-policy"
```

Request body

```
{
  "input" : {
    "policy_uuid" : "string",
    "schedule_info" : {
      "schedule_time" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "deployment_info_uuid" : "string",
    "status" : "string",
    "message" : "string"
  }
}
```


Deployment_info

Deployment info.

Add a new deployment_info

```
POST /policy-mgmt/deployment_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		deployment_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	deployment_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/deployment_info"
```

Request body

```

{
  "deployment_state" : { },
  "deployment_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "job_uuid" : { },
  "schedule_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_snapshot" : [ null ],
  "policy_diff" : [ null ],
  "device_info" : [ null ]
}

```

Example HTTP response

Response 200

```
{
  "deployment_state" : { },
  "deployment_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "job_uuid" : { },
  "schedule_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_snapshot" : [ null ],
  "policy_diff" : [ null ],
  "device_info" : [ null ]
}
```

Get the deployment_info list

```
GET /policy-mgmt/deployment_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< deployment_info > array

Example HTTP request

Request path

```
"/policy-mgmt/deployment_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single deployment_info

```
GET /policy-mgmt/deployment_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	deployment_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/deployment_info/0"
```

Example HTTP response

Response 200

```
{
  "deployment_state" : { },
  "deployment_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "job_uuid" : { },
  "schedule_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_snapshot" : [ null ],
  "policy_diff" : [ null ],
  "device_info" : [ null ]
}
```

Update deployment_info information

```
PUT /policy-mgmt/deployment_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	deployment_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/deployment_info/0"
```

Example HTTP response

Response 200

```
{
  "deployment_state" : { },
  "deployment_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "job_uuid" : { },
  "schedule_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_snapshot" : [ null ],
  "policy_diff" : [ null ],
  "device_info" : [ null ]
}
```

Delete a single deployment_info

```
DELETE /policy-mgmt/deployment_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/deployment_info/0"
```

Device_info

List of device info generated as part of deployment.

Add a new device_info

```
POST /policy-mgmt/device_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>device_info{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>device_info{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_info"
```

Request body

```
{
  "device_uuid" : { },
  "site_uuid" : { },
  "device_policy_diff" : { },
  "task_info" : {
    "task_path" : "string",
    "task_uuid" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Example HTTP response

Response 200

```
{
  "device_uuid" : { },
  "site_uuid" : { },
  "device_policy_diff" : { },
  "task_info" : {
    "task_path" : "string",
    "task_uuid" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Get the device_info list

```
GET /policy-mgmt/device_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< device_info > array

Example HTTP request

Request path

```
"/policy-mgmt/device_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single device_info

```
GET /policy-mgmt/device_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	device_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_info/0"
```

Example HTTP response

Response 200

```
{
  "device_uuid" : { },
  "site_uuid" : { },
  "device_policy_diff" : { },
  "task_info" : {
    "task_path" : "string",
    "task_uuid" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Update device_info information

```
PUT /policy-mgmt/device_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	device_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_info/0"
```

Example HTTP response

Response 200

```

{
  "device_uuid" : { },
  "site_uuid" : { },
  "device_policy_diff" : { },
  "task_info" : {
    "task_path" : "string",
    "task_uuid" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Delete a single device_info

```
DELETE /policy-mgmt/device_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_info/0"
```

Device_snapshot_info

Snapshot info for policy per device.

Add a new device_snapshot_info

```
POST /policy-mgmt/device_snapshot_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>device_snapshot_info{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>device_snapshot_info{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_snapshot_info"
```

Request body

```
{
  "device_uuid" : { },
  "site_uuid" : { },
  "last_successful_snapshot" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Example HTTP response

Response 200


```
{
  "device_uuid" : { },
  "site_uuid" : { },
  "last_successful_snapshot" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Get the device_snapshot_info list

```
GET /policy-mgmt/device_snapshot_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	<device_snapshot_info> array

Example HTTP request

Request path

```
"/policy-mgmt/device_snapshot_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single device_snapshot_info

```
GET /policy-mgmt/device_snapshot_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	device_snapshot_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_snapshot_info/0"
```

Example HTTP response

Response 200

```
{
  "device_uuid" : { },
  "site_uuid" : { },
  "last_successful_snapshot" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Update device_snapshot_info information

PUT /policy-mgmt/device_snapshot_info/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	device_snapshot_info{id}
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_snapshot_info/0"
```

Example HTTP response

Response 200

```
{
  "device_uuid" : { },
  "site_uuid" : { },
  "last_successful_snapshot" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Delete a single device_snapshot_info

```
DELETE /policy-mgmt/device_snapshot_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/device_snapshot_info/0"
```

Get-dirty-policies

Returns a list of dirty policies with changes not yet deployed to the relevant devices, or if `policy_uuid` is passed and policy is dirty, returns the specific policy.

Execute get-dirty-policies RPC

```
POST /policy-mgmt/get-dirty-policies
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-dirty-policies-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-dirty-policies-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/get-dirty-policies"
```

Request body

```
{  
  "input" : {  
    "policy_uuid" : "string"  
  }  
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "dirty_policies" : [ {
      "administrative_domain" : "string",
      "type_" : "string",
      "other_definition" : "string",
      "fq_name" : "string",
      "uuid" : "string",
      "href" : "string",
      "parent_uuid" : "string",
      "parent_href" : "string",
      "parent_type" : "string",
      "display_name" : "string",
      "id_perms" : {
        "permissions" : {
          "owner" : "string",
          "group" : "string"
        },
        "uuid" : {
          "uuid_mslong" : 0,
          "uuid_lslong" : 0
        },
        "enable" : true,
        "created" : "string",
        "last_modified" : "string",
        "description" : "string",
        "user_visible" : true
      },
      "perms2" : {
        "owner" : "string",
        "share" : {
          "tenant" : "string"
        }
      },
      "policy_name" : "string",
      "policy_type" : "string",
      "policy_uuid" : "string",
      "policy_owner" : "string",
      "last_update_timestamp" : 0,
      "description" : "string"
    } ]
  }
}

```


Get-effective-rules

Retrieve all effective rules of a policy.

Execute [get-effective-rules](#) RPC

```
POST /policy-mgmt/get-effective-rules
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-effective-rules-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-effective-rules-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/get-effective-rules"
```

Request body

```
{
  "input" : {
    "policy_uuid" : "string",
    "paging_context" : {
      "start" : 0,
      "size" : 0,
      "filter" : "string",
      "sorter" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "rules" : [ {
      "action" : "string",
      "sla_profile" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "rule_uuid" : "string",
      "seq" : 0,
      "last_update_timestamp" : 0,
      "update_number" : 0,
      "creation_timestamp" : 0,
      "rule_name" : "string",
      "src_endpoints" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "dst_endpoints" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      }
    }
  ]
}
```

```
    },
    "options" : {
      "logging" : {
        "enable" : true
      },
      "scheduler" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      }
    },
    "rule_description" : "string"
  } ],
  "total" : 0
}
```

Get-rules-summary

Gets the rules summary for a site.

[Execute get-rules-summary RPC](#)

POST /policy-mgmt/get-rules-summary

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-rules-summary-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-rules-summary-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/get-rules-summary"
```

Request body

```
{
  "input" : {
    "policy_type" : "string",
    "site_uuid" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "applicable_count" : 0,
    "total_count" : 0,
    "deployed_count" : 0,
    "undeployed_count" : 0,
    "last_modifier" : "string",
    "last_update_timestamp" : 0
  }
}
```

Intent_policy

list of policies.

Add a new intent_policy

```
POST /policy-mgmt/intent_policy
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>intent_policy{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>intent_policy{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/intent_policy"
```

Request body

```

{
  "policy_type" : { },
  "rule_order" : {
    "seq" : 0,
    "rule_uuid" : "string"
  },
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_rule" : [ null ],
  "object_info" : [ null ],
  "operational_info" : [ null ]
}

```

Example HTTP response

Response 200

```
{
  "policy_type" : { },
  "rule_order" : {
    "seq" : 0,
    "rule_uuid" : "string"
  },
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_rule" : [ null ],
  "object_info" : [ null ],
  "operational_info" : [ null ]
}
```

Get the intent_policy list

```
GET /policy-mgmt/intent_policy
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< intent_policy > array

Example HTTP request

Request path

```
"/policy-mgmt/intent_policy"
```

Example HTTP response

Response 200

```
"array"
```

Get a single intent_policy

```
GET /policy-mgmt/intent_policy/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	intent_policy{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/intent_policy/0"
```

Example HTTP response

Response 200

```
{
  "policy_type" : { },
  "rule_order" : {
    "seq" : 0,
    "rule_uuid" : "string"
  },
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_rule" : [ null ],
  "object_info" : [ null ],
  "operational_info" : [ null ]
}
```

Update intent_policy information

```
PUT /policy-mgmt/intent_policy/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	intent_policy{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/intent_policy/0"
```

Example HTTP response

Response 200

```

{
  "policy_type" : { },
  "rule_order" : {
    "seq" : 0,
    "rule_uuid" : "string"
  },
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "policy_rule" : [ null ],
  "object_info" : [ null ],
  "operational_info" : [ null ]
}

```

Delete a single intent_policy

```
DELETE /policy-mgmt/intent_policy/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/intent_policy/0"
```

Move-rule

Move an existing rule after another rule. To make the API idempotent, read the policy record and do the following: 1) Update rule.rule_order JSON blob with the newly inserted rule. If the rule is inserted before another rule, update the rule.seq for all the rules after the inserted rule. 2) Update rule.last_update_timestamp with current time.

Execute move-rule RPC

```
POST /policy-mgmt/move-rule
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		move-rule-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	move-rule-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/move-rule"
```

Request body

```
{
  "input" : {
    "policy_uuid" : "string",
    "rule_uuid" : "string",
    "position" : 0
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

Object_info

object_info.name attribute needs to be the same as the object_info.object_uuid. This is important as we can efficiently query the object_info from object's UUID using HAPI FQ name query. For object that does not support UUID, like SD object, we generate UUID from DB table name and DB record primary key using uuid.uuid3() API. See <https://docs.python.org/2/library/uuid.html#uuid.uuid3> for details.

Add a new object_info

```
POST /policy-mgmt/object_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		object_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	object_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/object_info"
```

Request body

```

{
  "object_type" : { },
  "object_name" : "string",
  "object_uuid" : "string",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "object_type" : { },
  "object_name" : "string",
  "object_uuid" : "string",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Get the object_info list

```
GET /policy-mgmt/object_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< object_info > array

Example HTTP request

Request path


```
"/policy-mgmt/object_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single object_info

```
GET /policy-mgmt/object_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	object_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/object_info/0"
```

Example HTTP response

Response 200

```

{
  "object_type" : { },
  "object_name" : "string",
  "object_uuid" : "string",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Update object_info information

```
PUT /policy-mgmt/object_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	object_info{id}

HTTP Code	Description	Schema
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/object_info/0"
```

Example HTTP response

Response 200

```

{
  "object_type" : { },
  "object_name" : "string",
  "object_uuid" : "string",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Delete a single object_info

```
DELETE /policy-mgmt/object_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/object_info/0"
```

Object_meta_info

Object type info.

Add a new object_meta_info

```
POST /policy-mgmt/object_meta_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>object_meta_info{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>object_meta_info{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/object_meta_info"
```

Request body

```

{
  "object_type" : { },
  "micro_service_info" : {
    "service_name" : "string",
    "api_info" : {
      "snapshotting" : "string",
      "ref" : "string",
      "unref" : "string",
      "get" : "string"
    },
    "notification_info" : [ {
      "queue_name" : "string",
      "durable" : true,
      "exchange_name" : "string",
      "exchange_type" : "string",
      "routing_key" : "string"
    } ],
    "search_syntax" : "string",
    "search_fields" : "string"
  },
  "dirty_marker" : {
    "plugin-name" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200


```

{
  "object_type" : { },
  "micro_service_info" : {
    "service_name" : "string",
    "api_info" : {
      "snapshotting" : "string",
      "ref" : "string",
      "unref" : "string",
      "get" : "string"
    },
    "notification_info" : [ {
      "queue_name" : "string",
      "durable" : true,
      "exchange_name" : "string",
      "exchange_type" : "string",
      "routing_key" : "string"
    } ],
    "search_syntax" : "string",
    "search_fields" : "string"
  },
  "dirty_marker" : {
    "plugin-name" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Get the `object_meta_info` list

```
GET /policy-mgmt/object_meta_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< <code>object_meta_info</code> > array

Example HTTP request

Request path

```
"/policy-mgmt/object_meta_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single `object_meta_info`

```
GET /policy-mgmt/object_meta_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>object_meta_info{id</code> <code>}</code>
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/object_meta_info/0"
```

Example HTTP response

Response 200

```

{
  "object_type" : { },
  "micro_service_info" : {
    "service_name" : "string",
    "api_info" : {
      "snapshotting" : "string",
      "ref" : "string",
      "unref" : "string",
      "get" : "string"
    },
    "notification_info" : [ {
      "queue_name" : "string",
      "durable" : true,
      "exchange_name" : "string",
      "exchange_type" : "string",
      "routing_key" : "string"
    } ],
    "search_syntax" : "string",
    "search_fields" : "string"
  },
  "dirty_marker" : {
    "plugin-name" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Update object_meta_info information

```
PUT /policy-mgmt/object_meta_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	object_meta_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/object_meta_info/0"
```

Example HTTP response

Response 200

```

{
  "object_type" : { },
  "micro_service_info" : {
    "service_name" : "string",
    "api_info" : {
      "snapshotting" : "string",
      "ref" : "string",
      "unref" : "string",
      "get" : "string"
    },
    "notification_info" : [ {
      "queue_name" : "string",
      "durable" : true,
      "exchange_name" : "string",
      "exchange_type" : "string",
      "routing_key" : "string"
    } ],
    "search_syntax" : "string",
    "search_fields" : "string"
  },
  "dirty_marker" : {
    "plugin-name" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

[Delete a single object_meta_info](#)

```
DELETE /policy-mgmt/object_meta_info/{id0}
```

[Parameters](#)

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

[Responses](#)

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

[Example HTTP request](#)[Request path](#)

```
"/policy-mgmt/object_meta_info/0"
```

[Operational_info](#)

Operational info.

[Add a new operational_info](#)

```
POST /policy-mgmt/operational_info
```

[Parameters](#)

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		operational_info{id}	

[Responses](#)

HTTP Code	Description	Schema
200	Successful operation	operational_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/operational_info"
```

Request body


```
{
  "current_deployment" : { },
  "last_successful_deployment" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "deployment_info" : [ null ],
  "device_snapshot_info" : [ null ]
}
```

Example HTTP response

Response 200

```
{
  "current_deployment" : { },
  "last_successful_deployment" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "deployment_info" : [ null ],
  "device_snapshot_info" : [ null ]
}
```

Get the operational_info list

GET /policy-mgmt/operational_info

Responses

HTTP Code	Description	Schema
200	Successful operation	< operational_info > array

Example HTTP request

Request path

"/policy-mgmt/operational_info"

Example HTTP response

Response 200

```
"array"
```

Get a single operational_info

```
GET /policy-mgmt/operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	operational_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/operational_info/0"
```

Example HTTP response

Response 200

```

{
  "current_deployment" : { },
  "last_successful_deployment" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "deployment_info" : [ null ],
  "device_snapshot_info" : [ null ]
}

```

Update `operational_info` information

```
PUT /policy-mgmt/operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>operational_info{id}</code>
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/operational_info/0"
```

Example HTTP response

Response 200

```
{
  "current_deployment" : { },
  "last_successful_deployment" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "deployment_info" : [ null ],
  "device_snapshot_info" : [ null ]
}
```

Delete a single operational_info

```
DELETE /policy-mgmt/operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/operational_info/0"
```

Policy_diff

Policy diff.

Add a new policy_diff

```
POST /policy-mgmt/policy_diff
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>policy_diff{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>policy_diff{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_diff"
```

Request body

```
{
  "src_snapshot" : { },
  "dst_snapshot" : { },
  "rule_diff" : "<<_csp-policy-mgmt_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Example HTTP response

Response 200


```
{
  "src_snapshot" : { },
  "dst_snapshot" : { },
  "rule_diff" : "<<_csp-policy-mgmt_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Get the policy_diff list

```
GET /policy-mgmt/policy_diff
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< policy_diff > array

Example HTTP request

Request path

```
"/policy-mgmt/policy_diff"
```

Example HTTP response

Response 200

```
"array"
```

Get a single policy_diff

```
GET /policy-mgmt/policy_diff/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_diff{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_diff/0"
```

Example HTTP response

Response 200

```
{
  "src_snapshot" : { },
  "dst_snapshot" : { },
  "rule_diff" : "<<_csp-policy-mgmt_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Update policy_diff information

PUT /policy-mgmt/policy_diff/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_diff{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_diff/0"
```

Example HTTP response

Response 200

```
{
  "src_snapshot" : { },
  "dst_snapshot" : { },
  "rule_diff" : "<<_csp-policy-mgmt_xsd_any>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Delete a single policy_diff

```
DELETE /policy-mgmt/policy_diff/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_diff/0"
```

Policy_meta_info

Policy meta information.

Add a new policy_meta_info

```
POST /policy-mgmt/policy_meta_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>policy_meta_info{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>policy_meta_info{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_meta_info"
```

Request body

```
{
  "policy_type" : { },
  "supported_src_endpoint_objects" : { },
  "supported_dst_endpoint_objects" : { },
  "supported_options" : { },
  "capability" : { },
  "mapper_service" : {
    "service_name" : "string",
    "mapper_api" : "string",
    "requires_device_diff" : true
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Example HTTP response

Response 200

```
{
  "policy_type" : { },
  "supported_src_endpoint_objects" : { },
  "supported_dst_endpoint_objects" : { },
  "supported_options" : { },
  "capability" : { },
  "mapper_service" : {
    "service_name" : "string",
    "mapper_api" : "string",
    "requires_device_diff" : true
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Get the policy_meta_info list

```
GET /policy-mgmt/policy_meta_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< policy_meta_info > array

Example HTTP request

Request path

```
"/policy-mgmt/policy_meta_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single `policy_meta_info`

```
GET /policy-mgmt/policy_meta_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_meta_info {id }
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_meta_info/0"
```

Example HTTP response

Response 200

```
{
  "policy_type" : { },
  "supported_src_endpoint_objects" : { },
  "supported_dst_endpoint_objects" : { },
  "supported_options" : { },
  "capability" : { },
  "mapper_service" : {
    "service_name" : "string",
    "mapper_api" : "string",
    "requires_device_diff" : true
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}
```

Update policy_meta_info information

PUT /policy-mgmt/policy_meta_info/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_meta_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/policy-mgmt/policy_meta_info/0"

Example HTTP response

Response 200

```

{
  "policy_type" : { },
  "supported_src_endpoint_objects" : { },
  "supported_dst_endpoint_objects" : { },
  "supported_options" : { },
  "capability" : { },
  "mapper_service" : {
    "service_name" : "string",
    "mapper_api" : "string",
    "requires_device_diff" : true
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string"
}

```

Delete a single policy_meta_info

```
DELETE /policy-mgmt/policy_meta_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_meta_info/0"
```

Policy_rule

list of rules

Add a new policy_rule

```
POST /policy-mgmt/policy_rule
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		policy_rule{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_rule{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_rule"
```

Request body

```

{
  "creation_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "src_endpoints" : { },
  "dst_endpoints" : { },
  "action" : { },
  "sla_profile" : { },
  "options" : {
    "logging" : {
      "enable" : true
    },
    "scheduler" : "string"
  },
  "rule_description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "object_info" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "creation_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "src_endpoints" : { },
  "dst_endpoints" : { },
  "action" : { },
  "sla_profile" : { },
  "options" : {
    "logging" : {
      "enable" : true
    },
    "scheduler" : "string"
  },
  "rule_description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "object_info" : [ null ]
}

```

Get the policy_rule list

```
GET /policy-mgmt/policy_rule
```


Responses

HTTP Code	Description	Schema
200	Successful operation	< policy_rule > array

Example HTTP request

Request path

```
"/policy-mgmt/policy_rule"
```

Example HTTP response

Response 200

```
"array"
```

Get a single `policy_rule`

```
GET /policy-mgmt/policy_rule/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_rule{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_rule/0"
```

Example HTTP response

Response 200

```

{
  "creation_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "src_endpoints" : { },
  "dst_endpoints" : { },
  "action" : { },
  "sla_profile" : { },
  "options" : {
    "logging" : {
      "enable" : true
    },
    "scheduler" : "string"
  },
  "rule_description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "object_info" : [ null ]
}

```

Update policy_rule information

PUT /policy-mgmt/policy_rule/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_rule{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_rule/0"
```

Example HTTP response

Response 200

```

{
  "creation_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "last_update_timestamp" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
  "src_endpoints" : { },
  "dst_endpoints" : { },
  "action" : { },
  "sla_profile" : { },
  "options" : {
    "logging" : {
      "enable" : true
    },
    "scheduler" : "string"
  },
  "rule_description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "group" : "string"
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "share" : [ {
      "tenant" : "string"
    } ]
  },
  "display-name" : "string",
  "object_info" : [ null ]
}

```

Delete a single policy_rule

```
DELETE /policy-mgmt/policy_rule/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_rule/0"
```

Policy_snapshot

List of policy_snapshot created during policy deployment.

Add a new policy_snapshot

```
POST /policy-mgmt/policy_snapshot
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		policy_snapshot{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_snapshot{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_snapshot"
```

Request body

```
{
  "referenced_objects" : {
    "object_type" : "string",
    "objects" : [ {
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    } ]
  },
  "outbound_zone_info" : "<<_csp-policy-mgmt_xsd_any>>",
  "rules" : {
    "action" : "string",
    "sla_profile" : {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    },
    "rule_uuid" : "string",
    "enforced_location" : [ {
      "site_uuid" : "string",
      "devices" : "string"
    } ],
    "last_update_timestamp" : 0,
    "update_number" : 0,
    "creation_timestamp" : 0,
  }
}
```

```

"rule_name" : "string",
"src_endpoints" : [ {
  "object_type" : "string",
  "object_name" : "string",
  "object_uuid" : "string",
  "last_update_timestamp" : 0,
  "update_number" : 0
} ],
"dst_endpoints" : [ {
  "object_type" : "string",
  "object_name" : "string",
  "object_uuid" : "string",
  "last_update_timestamp" : 0,
  "update_number" : 0
} ],
"options" : {
  "logging" : {
    "enable" : true
  },
  "scheduler" : {
    "object_type" : "string",
    "object_name" : "string",
    "object_uuid" : "string",
    "last_update_timestamp" : 0,
    "update_number" : 0
  }
},
"rule_description" : "string",
},
"policy_update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "group" : "string"
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",

```



```

    "share" : [ {
        "tenant" : "string"
    } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "referenced_objects" : {
    "object_type" : "string",
    "objects" : [ {
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    } ]
  },
  "outbound_zone_info" : "<<_csp-policy-mgmt_xsd_any>>",
  "rules" : {
    "action" : "string",
    "sla_profile" : {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    },
    "rule_uuid" : "string",
    "enforced_location" : [ {
      "site_uuid" : "string",
      "devices" : "string"
    } ],
    "last_update_timestamp" : 0,
    "update_number" : 0,
    "creation_timestamp" : 0,
    "rule_name" : "string",
    "src_endpoints" : [ {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    } ],
    "dst_endpoints" : [ {

```

```

    "object_type" : "string",
    "object_name" : "string",
    "object_uuid" : "string",
    "last_update_timestamp" : 0,
    "update_number" : 0
  } ],
  "options" : {
    "logging" : {
      "enable" : true
    },
    "scheduler" : {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    }
  },
  "rule_description" : "string"
},
"policy_update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "group" : "string"
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "share" : [ {
    "tenant" : "string"
  } ]
},
"display-name" : "string"
}

```

Get the `policy_snapshot` list

```
GET /policy-mgmt/policy_snapshot
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< policy_snapshot > array

Example HTTP request

Request path

```
"/policy-mgmt/policy_snapshot"
```

Example HTTP response

Response 200

```
"array"
```

Get a single `policy_snapshot`

```
GET /policy-mgmt/policy_snapshot/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_snapshot{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_snapshot/0"
```

Example HTTP response

Response 200

```
{
  "referenced_objects" : {
    "object_type" : "string",
    "objects" : [ {
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    } ]
  },
  "outbound_zone_info" : "<<_csp-policy-mgmt_xsd_any>>",
  "rules" : {
    "action" : "string",
    "sla_profile" : {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    },
    "rule_uuid" : "string",
    "enforced_location" : [ {
      "site_uuid" : "string",
      "devices" : "string"
    } ],
    "last_update_timestamp" : 0,
    "update_number" : 0,
    "creation_timestamp" : 0,
    "rule_name" : "string",
    "src_endpoints" : [ {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
```

```

    "last_update_timestamp" : 0,
    "update_number" : 0
  } ],
  "dst_endpoints" : [ {
    "object_type" : "string",
    "object_name" : "string",
    "object_uuid" : "string",
    "last_update_timestamp" : 0,
    "update_number" : 0
  } ],
  "options" : {
    "logging" : {
      "enable" : true
    },
    "scheduler" : {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    }
  },
  "rule_description" : "string"
},
"policy_update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "group" : "string"
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "share" : [ {
    "tenant" : "string"
  } ]
},
"display-name" : "string"

```

```
}

```

Update `policy_snapshot` information

```
PUT /policy-mgmt/policy_snapshot/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_snapshot{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_snapshot/0"
```

Example HTTP response

Response 200

```
{
  "referenced_objects" : {
    "object_type" : "string",
    "objects" : [ {
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    } ]
  },
}
```

```

"outbound_zone_info" : "<<_csp-policy-mgmt_xsd_any>>",
"rules" : {
  "action" : "string",
  "sla_profile" : {
    "object_type" : "string",
    "object_name" : "string",
    "object_uuid" : "string",
    "last_update_timestamp" : 0,
    "update_number" : 0
  },
  "rule_uuid" : "string",
  "enforced_location" : [ {
    "site_uuid" : "string",
    "devices" : "string"
  } ],
  "last_update_timestamp" : 0,
  "update_number" : 0,
  "creation_timestamp" : 0,
  "rule_name" : "string",
  "src_endpoints" : [ {
    "object_type" : "string",
    "object_name" : "string",
    "object_uuid" : "string",
    "last_update_timestamp" : 0,
    "update_number" : 0
  } ],
  "dst_endpoints" : [ {
    "object_type" : "string",
    "object_name" : "string",
    "object_uuid" : "string",
    "last_update_timestamp" : 0,
    "update_number" : 0
  } ],
  "options" : {
    "logging" : {
      "enable" : true
    },
    "scheduler" : {
      "object_type" : "string",
      "object_name" : "string",
      "object_uuid" : "string",
      "last_update_timestamp" : 0,
      "update_number" : 0
    }
  },
  "rule_description" : "string"
},

```

```

"policy_update_number" : "<<_csp-policy-mgmt_xsd_unsignedlong>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "group" : "string"
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "share" : [ {
    "tenant" : "string"
  } ]
},
"display-name" : "string"
}

```

Delete a single policy_snapshot

```
DELETE /policy-mgmt/policy_snapshot/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/policy_snapshot/0"
```

Update-rule

Update an existing rule with new rule info. To make the API idempotent, the implementation of this API persists the rule using the following steps: 1) Retrieves the rule from DB and compare it with the rule info from the API payload. For those objects that are no longer referenced in the rule, you should remove them from the rule.object_info_refs. For those objects that are newly referenced by the rule, you should check the object_info's existence by querying the object_info table with the object's UUID (the object_info's UUID is the same as the object's UUID). If object exists, simply add the object UUID to the rule.object_info_refs list. Otherwise, add object_info to the object_info table first before adding it to the rule.object_info_refs. 2) Updates the rule with the rule info from the API payload. 3) Updates the policy.last_update_timestamp with current update time.

Execute update-rule RPC

```
POST /policy-mgmt/update-rule
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		update-rule-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	update-rule-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/policy-mgmt/update-rule"
```

Request body

```

{
  "input" : {
    "rule_uuid" : "string",
    "rule" : {
      "action" : "string",
      "sla_profile" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "creation_timestamp" : 0,
      "rule_name" : "string",
      "src_endpoints" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "dst_endpoints" : {
        "object_type" : "string",
        "object_name" : "string",
        "object_uuid" : "string",
        "last_update_timestamp" : 0,
        "update_number" : 0
      },
      "options" : {
        "logging" : {
          "enable" : true
        },
        "scheduler" : {
          "object_type" : "string",
          "object_name" : "string",
          "object_uuid" : "string",
          "last_update_timestamp" : 0,
          "update_number" : 0
        }
      },
      "rule_description" : "string"
    }
  }
}

```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string"
  }
}
```

9.10.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

AddRuleInputRuleSlaProfileType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : 0	integer(int64)
object_name <i>optional</i>	Object Name. Example : "string"	string
object_type <i>optional</i>	Object type. Example : "string"	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : "string"	string

Name	Description	Schema
update_number <i>optional</i>	Update number for object. Example : 0	integer(int64)

AddRuleInputRuleType

Name	Description	Schema
action <i>optional</i>	Example : "string"	enum (PERMIT, DENY, REJECT)
creation_timestamp <i>optional</i>	Timestamp from when rule is created. Because of its precision to the micro-second, used to generate idempotent rule name. NOTE: this timestamp is in micro-seconds and generated using python. For details, see https://docs.python.org/2/library/time.html#time.time . Example : 0	integer(int64)
dst_endpoints <i>optional</i>	Example : "RuleDstEndpointsType"	RuleDstEndpointsType
options <i>optional</i>	Example : "RuleOptionsType"	RuleOptionsType
rule_description <i>optional</i>	Rule description. Example : "string"	string
rule_name <i>optional</i>	Rule name. Example : "string"	string
sla_profile <i>optional</i>	Example : "AddRuleInputRuleSlaProfileType"	AddRuleInputRuleSlaProfileType
src_endpoints <i>optional</i>	Example : "RuleSrcEndpointsType"	RuleSrcEndpointsType

AddRule_InputType

Name	Description	Schema
insert_before_rule <i>optional</i>	Optional field to specify the rule where this rule is inserted after. If missing, the rule is appended as the last rule. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
policy_uuid <i>optional</i>	Policy UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
rule <i>optional</i>	Example : "AddRuleInputRuleType"	AddRuleInputRuleType

AddRule_OutputType

Name	Description	Schema
rule_uuid <i>optional</i>	Rule UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CancelDeployment_InputType

Name	Description	Schema
policy_uuid <i>optional</i>	Policy UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

CancelDeployment_OutputType

Name	Description	Schema
status <i>optional</i>	Status. Example : "string"	enum (success, in-progress, failed)

DeleteRule_InputType

Name	Description	Schema
rule_uuids <i>optional</i>	Rule UUIDs. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeleteRule_OutputType

Name	Description	Schema
status <i>optional</i>	Status type. Example : "string"	string

DeployPolicyInputScheduleInfoType

Name	Description	Schema
schedule_time <i>optional</i>	Scheduled deployment time. Example : "string"	string

DeployPolicyJob_InputType

Name	Description	Schema
deployment_info_uuid <i>optional</i>	Deployment info UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
policy_uuid <i>optional</i>	Policy UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeployPolicyJob_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
message <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Job status. Example : "string"	enum (success, in-progress, failed)

DeployPolicy_InputType

Name	Description	Schema
policy_uuid <i>optional</i>	Policy UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
schedule_info <i>optional</i>	Example : "DeployPolicyInputScheduleInfoType"	DeployPolicyInputScheduleInfoType

DeployPolicy_OutputType

Name	Description	Schema
deployment_info_uuid <i>optional</i>	Current policy deployment info uuid on which UI will listen for notifications. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
message <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Status. Example : "string"	enum (success, in-progress, failed)

DeploymentInfoDeploymentStateType

Deployment status.

Type : enum (SNAPSHOTTING, SNAPSHOT_FAILURE, DIFFING, DIFF_FAILURE, DEPLOYMENT_SCHEDULED, DEPLOYMENT_CANCELLED, DEPLOYING, DEPLOY_FAILURE, DEPLOYED)

DeviceInfoTaskInfoType

Name	Description	Schema
task_path <i>optional</i>	Task path associated with this device. Example : "string"	string
task_uuid <i>optional</i>	Task UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DirtyPoliciesIdPermsType

Name	Description	Schema
created <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
last_modified <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "IdPermsPermissionsType"	IdPermsPermissionsType
user_visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "IdPermsUuidType"	IdPermsUuidType

DirtyPoliciesPerms2Type

Name	Description	Schema
owner <i>optional</i>	This field contains the tenant-id that created the object. Example : "string"	string
share <i>optional</i>	Example : "Perms2ShareType"	Perms2ShareType

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

GetDirtyPoliciesOutputDirtyPoliciesType

Name	Description	Schema
administrative_domain <i>optional</i>	Example : "string"	string
description <i>optional</i>	Summary on policy status. Example : "string"	string
display_name <i>optional</i>	Display name Example : "string"	string
fq_name <i>optional</i>	FQDN for the IFMAP identity Example : "string"	string

Name	Description	Schema
href <i>optional</i>	HATEOAS HREF for the identity node Example : "string"	string
id_perms <i>optional</i>	Example : "DirtyPoliciesIdPermsType"	DirtyPoliciesIdPermsType
last_update_timestamp <i>optional</i>	Time policy last modified. Example : 0	integer(int64)
other_definition <i>optional</i>	Example : "string"	string
parent_href <i>optional</i>	parent node HATEOAS HREF Example : "string"	string
parent_type <i>optional</i>	parent node type Example : "string"	string
parent_uuid <i>optional</i>	parent node UUID Example : "string"	string
perms2 <i>optional</i>	Example : "DirtyPoliciesPerms2Type"	DirtyPoliciesPerms2Type
policy_name <i>optional</i>	Policy name. Example : "string"	string
policy_owner <i>optional</i>	Policy owner. Example : "string"	string
policy_type <i>optional</i>	Policy type. Example : "string"	string
policy_uuid <i>optional</i>	Policy UUID. Example : "string"	string
type <i>optional</i>	Example : "string"	enum (aik_name, distinguished_name, dns_name, email_address, hip_hit, kerberos_principal, username, sip_uri, tel_uri, other)
uuid <i>optional</i>	UUID for the IFMAP identity Example : "string"	string

GetDirtyPolicies_InputType

Name	Description	Schema
policy_uuid <i>optional</i>	Policy UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetDirtyPolicies_OutputType

Name	Description	Schema
dirty_policies <i>optional</i>	Example : ["GetDirtyPoliciesOutputDirtyPoliciesType"]	< GetDirtyPoliciesOutput DirtyPoliciesType > array

GetEffectiveRulesInputPagingContextType

Name	Description	Schema
filter <i>optional</i>	Filter. Example : "string"	string
size <i>optional</i>	Page size. Example : 0	integer(int32)
sorter <i>optional</i>	Sorter. Example : "string"	string
start <i>optional</i>	Page start number. Example : 0	integer(int32)

GetEffectiveRulesOutputRulesSlaProfileType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : 0	integer(int64)
object_name <i>optional</i>	Object Name. Example : "string"	string
object_type <i>optional</i>	Object type. Example : "string"	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : "string"	string
update_number <i>optional</i>	Update number for object. Example : 0	integer(int64)

GetEffectiveRulesOutputRulesType

Name	Description	Schema
action <i>optional</i>	Example : "string"	enum (PERMIT, DENY, REJECT)
creation_timestamp <i>optional</i>	Timestamp from when rule is created. Because of its precision to the micro-second, used to generate idempotent rule name. NOTE: this timestamp is in micro-seconds and generated using python. For details, see https://docs.python.org/2/library/time.html#time.time . Example : 0	integer(int64)

Name	Description	Schema
dst_endpoints <i>optional</i>	Example : "RulesDstEndpointsType"	RulesDstEndpointsType
last_update_timestamp <i>optional</i>	Timestamp from when this rule was last updated. Example : 0	integer(int64)
options <i>optional</i>	Example : "RulesOptionsType"	RulesOptionsType
rule_description <i>optional</i>	Rule description. Example : "string"	string
rule_name <i>optional</i>	Rule name. Example : "string"	string
rule_uuid <i>optional</i>	Rule UUID. Example : "string"	string
seq <i>optional</i>	Sequence number. Example : 0	integer(int32)
sla_profile <i>optional</i>	Example : "GetEffectiveRulesOutputRulesSlaProfileType"	GetEffectiveRulesOutputRulesSlaProfileType
src_endpoints <i>optional</i>	Example : "RulesSrcEndpointsType"	RulesSrcEndpointsType
update_number <i>optional</i>	Update number that increments when rule is changed. Example : 0	integer(int64)

[GetEffectiveRules_InputType](#)

Name	Description	Schema
paging_context <i>optional</i>	Example : "GetEffectiveRulesInputPagingContextType"	GetEffectiveRulesInputPagingContextType
policy_uuid <i>optional</i>	Policy UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

[GetEffectiveRules_OutputType](#)

Name	Description	Schema
rules <i>optional</i>	Example : ["GetEffectiveRulesOutputRulesType"]	< GetEffectiveRulesOutputRulesType > array
total <i>optional</i>	Total count. Example : 0	integer(int32)

[GetRulesSummary_InputType](#)

Name	Description	Schema
policy_type <i>optional</i>	Policy type; SDWAN or firewall. Example : "string"	string

Name	Description	Schema
site_uuid <i>optional</i>	Site UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetRulesSummary_OutputType

Name	Description	Schema
applicable_count <i>optional</i>	Rule count applicable for the specified site. Example : 0	integer(int32)
deployed_count <i>optional</i>	Rule count deployed for the specified site. Example : 0	integer(int32)
last_modifier <i>optional</i>	The last modified user for last edited rule applicable to specified site. Example : "string"	string
last_update_timestamp <i>optional</i>	The last update time for last edited rule applicable to specified site. Example : 0	integer(int64)
total_count <i>optional</i>	Total count for the policy type. Example : 0	integer(int32)
undeployed_count <i>optional</i>	Rule count undeployed for the specified site. Example : 0	integer(int32)

IdPermsPermissionsType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
owner <i>optional</i>	Example : "string"	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean

Name	Description	Schema
uuid <i>optional</i>	Example : "UuidType"	UuidType

IdPermsUuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

IntentPolicyRuleOrderType

Name	Description	Schema
rule_uuid <i>optional</i>	Rule UUID. Example : "string"	string
seq <i>required</i>	Rules sequence. Example : 0	integer(int32)

LeafrefType

Diff between ploicy snapshot taken for this device deployment and the last successful deployment.

Type : string

MicroServiceInfoApiInfoType

Name	Description	Schema
get <i>optional</i>	Get object URI. Example : "string"	string
ref <i>optional</i>	Ref URI. Example : "string"	string
snapshotting <i>optional</i>	URI. Example : "string"	string
unref <i>optional</i>	Un-Ref URI Example : "string"	string

MicroServiceInfoNotificationInfoType

Name	Description	Schema
durable <i>optional</i>	Whether durable. Example : true	boolean
exchange_name <i>optional</i>	Exchange name. Example : "string"	string
exchange_type <i>optional</i>	Exchange type. Example : "string"	string
queue_name <i>optional</i>	Notification queue. Example : "string"	string

Name	Description	Schema
routing_key <i>optional</i>	Routing key. Example : "string"	string

MoveRule_InputType

Name	Description	Schema
policy_uuid <i>optional</i>	Policy UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
position <i>optional</i>	Position to move the rule. Example : 0	integer(int32)
rule_uuid <i>optional</i>	Rule UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

MoveRule_OutputType

Name	Description	Schema
status <i>optional</i>	Status type. Example : "string"	string

ObjectMetaInfoDirtyMarkerType

Name	Description	Schema
plugin-name <i>optional</i>	Plugin name. Example : "string"	string

ObjectMetaInfoMicroServiceInfoType

Name	Description	Schema
api_info <i>optional</i>	Example : "MicroServiceInfoApiInfoType"	MicroServiceInfoApiInfoType
notification_info <i>optional</i>	Example : ["MicroServiceInfoNotificationInfoType"]	< MicroServiceInfoNotificationInfoType > array
search_fields <i>optional</i>	Searchable fields for the object type, for example: display_name. Example : "string"	string
search_syntax <i>optional</i>	Search syntax. Example : "string"	enum (HAPI, HAPI_ELASTICSEARCH, JUNOS_SPACE)
service_name <i>optional</i>	Service name. Example : "string"	string

ObjectType

Object Type.

Type : enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER,

SCHEDULER, SLA)

OptionsLoggingType

Name	Description	Schema
enable <i>optional</i>	Enable. Example : <code>true</code>	boolean

OptionsSchedulerType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : <code>0</code>	integer(int64)
object_name <i>optional</i>	Object Name. Example : <code>"string"</code>	string
object_type <i>optional</i>	Object type. Example : <code>"string"</code>	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : <code>"string"</code>	string
update_number <i>optional</i>	Update number for object. Example : <code>0</code>	integer(int64)

PermType

Name	Description	Schema
group <i>optional</i>	Example : <code>"string"</code>	string
owner <i>optional</i>	Example : <code>"string"</code>	string

PermType2

Name	Description	Schema
owner <i>optional</i>	Example : <code>"string"</code>	string
share <i>optional</i>	Example : <code>["ShareType"]</code>	< <code>ShareType</code> > array

Perms2ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : <code>"string"</code>	string

PolicyMetaInfoCapabilityType

Capabilities.

Type : enum (POLICY_ANALYSIS, RULE_POSITION_RECOMMENDATION)

PolicyMetaInfoMapperServiceType

Name	Description	Schema
mapper_api <i>optional</i>	The mapper service should provide following mapper API: rpc deploy-policy { input { leaf policy_uuid { type yang:uuid; } leaf current_policy_snapshot_uuid { type yang:uuid; } list device_diff_infos { leaf device_uuid { type yang:uuid; } leaf site_uuid { type yang:uuid; } leaf diff_uuid { type yang:uuid; } } } output { leaf status { type response; } list device_infos { key device_uuid; uses device_deployment_info; } } } Example : "string"	string
requires_device_diff <i>optional</i>	Specifies whether the device level diff is required by the service, if true the device_diff_infos will be populated. Example : true	boolean
service_name <i>optional</i>	Name of the microservice that implements the mapper RPC. Example : "string"	string

PolicyMetaInfoPolicyTypeType

Policy type.

Type : enum (SDWAN, FW)

PolicyMetaInfoSupportedOptionsType

Supported options.

Type : enum (LOGGING, SCHEDULER)

PolicyRuleActionType

Firewall rule actions.

Type : enum (PERMIT, DENY, REJECT)

PolicyRuleOptionsType

Name	Description	Schema
logging <i>optional</i>	Example : "OptionsLoggingType"	OptionsLoggingType
scheduler <i>optional</i>	Scheduler. Example : "string"	string

PolicySnapshotReferencedObjectsType

Name	Description	Schema
object_type <i>required</i>	Object type for each different object. Example : <code>"string"</code>	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
objects <i>optional</i>	Example : [<code>"ReferencedObjectsObjectsType"</code>]	< <code>ReferencedObjectsObjectsType</code> > array

PolicySnapshotRulesSlaProfileType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : <code>0</code>	integer(int64)
object_name <i>optional</i>	Object Name. Example : <code>"string"</code>	string
object_type <i>optional</i>	Object type. Example : <code>"string"</code>	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : <code>"string"</code>	string
update_number <i>optional</i>	Update number for object. Example : <code>0</code>	integer(int64)

PolicySnapshotRulesType

Name	Description	Schema
action <i>optional</i>	Example : <code>"string"</code>	enum (PERMIT, DENY, REJECT)
creation_timestamp <i>optional</i>	Timestamp from when rule is created. Because of its precision to the micro-second, used to generate idempotent rule name. NOTE: this timestamp is in micro-seconds and generated using python. For details, see https://docs.python.org/2/library/time.html#time.time . Example : <code>0</code>	integer(int64)
dst_endpoints <i>optional</i>	Example : [<code>"RulesDstEndpointsType"</code>]	< <code>RulesDstEndpointsType</code> > array
enforced_location <i>optional</i>	Example : [<code>"RulesEnforcedLocationType"</code>]	< <code>RulesEnforcedLocationType</code> > array

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update Example : 0	integer(int64)
options <i>optional</i>	Example : "RulesOptionsType"	RulesOptionsType
rule_description <i>optional</i>	Rule description. Example : "string"	string
rule_name <i>required</i>	Rule name. Example : "string"	string
rule_uuid <i>required</i>	Rules. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
sla_profile <i>optional</i>	Example : "PolicySnapshotRulesSlaProfileType"	PolicySnapshotRulesSlaProfileType
src_endpoints <i>optional</i>	Example : ["RulesSrcEndpointsType"]	< RulesSrcEndpointsType > array
update_number <i>optional</i>	Update number, will be incremented when rule is changed. Example : 0	integer(int64)

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : <code>"string"</code>	string
rule_object <i>optional</i>	Example : <code>"string"</code>	string
rule_perms <i>optional</i>	Example : <code>"RbacPermType"</code>	RbacPermType

ReferencedObjectsObjectsType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : <code>0</code>	integer(int64)
object_uuid <i>optional</i>	Object UUID. Example : <code>"string"</code>	string
update_number <i>optional</i>	Update number for object. Example : <code>0</code>	integer(int64)

RuleDstEndpointsType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : <code>0</code>	integer(int64)
object_name <i>optional</i>	Object Name. Example : <code>"string"</code>	string
object_type <i>optional</i>	Object type. Example : <code>"string"</code>	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : <code>"string"</code>	string
update_number <i>optional</i>	Update number for object. Example : <code>0</code>	integer(int64)

RuleOptionsType

Name	Description	Schema
logging <i>optional</i>	Example : <code>"OptionsLoggingType"</code>	OptionsLoggingType
scheduler <i>optional</i>	Example : <code>"OptionsSchedulerType"</code>	OptionsSchedulerType

RuleSrcEndpointsType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : 0	integer(int64)
object_name <i>optional</i>	Object Name. Example : "string"	string
object_type <i>optional</i>	Object type. Example : "string"	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : "string"	string
update_number <i>optional</i>	Update number for object. Example : 0	integer(int64)

RulesDstEndpointsType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : 0	integer(int64)
object_name <i>optional</i>	Object Name. Example : "string"	string
object_type <i>optional</i>	Object type. Example : "string"	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : "string"	string
update_number <i>optional</i>	Update number for object. Example : 0	integer(int64)

RulesEnforcedLocationType

Name	Description	Schema
devices <i>optional</i>	List of site-devices to which this rule will be deployed. Example : "string"	string
site_uuid <i>optional</i>	Enforced sites. Example : "string"	string

RulesOptionsType

Name	Description	Schema
logging <i>optional</i>	Example : "OptionsLoggingType"	OptionsLoggingType
scheduler <i>optional</i>	Example : "OptionsSchedulerType"	OptionsSchedulerType

RulesSrcEndpointsType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : 0	integer(int64)
object_name <i>optional</i>	Object Name. Example : "string"	string
object_type <i>optional</i>	Object type. Example : "string"	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : "string"	string
update_number <i>optional</i>	Update number for object. Example : 0	integer(int64)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string

UpdateRuleInputRuleSlaProfileType

Name	Description	Schema
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : 0	integer(int64)
object_name <i>optional</i>	Object Name. Example : "string"	string
object_type <i>optional</i>	Object type. Example : "string"	enum (SITE, SITE-GROUP, DEPARTMENT, APPLICATION, ADDRESS, SERVICE, USER, SCHEDULER, SLA)
object_uuid <i>optional</i>	Object UUID. Example : "string"	string

Name	Description	Schema
update_number <i>optional</i>	Update number for object. Example : 0	integer(int64)

UpdateRuleInputRuleType

Name	Description	Schema
action <i>optional</i>	Example : "string"	enum (PERMIT, DENY, REJECT)
creation_timestamp <i>optional</i>	Timestamp from when rule is created. Because of its precision to the micro-second, used to generate idempotent rule name. NOTE: this timestamp is in micro-seconds and generated using python. For details, see https://docs.python.org/2/library/time.html#time.time . Example : 0	integer(int64)
dst_endpoints <i>optional</i>	Example : "RuleDstEndpointsType"	RuleDstEndpointsType
options <i>optional</i>	Example : "RuleOptionsType"	RuleOptionsType
rule_description <i>optional</i>	Rule description. Example : "string"	string
rule_name <i>optional</i>	Rule name. Example : "string"	string
sla_profile <i>optional</i>	Example : "UpdateRuleInputRuleSlaProfileType"	UpdateRuleInputRuleSlaProfileType
src_endpoints <i>optional</i>	Example : "RuleSrcEndpointsType"	RuleSrcEndpointsType

UpdateRule_InputType

Name	Description	Schema
rule <i>optional</i>	Example : "UpdateRuleInputRuleType"	UpdateRuleInputRuleType
rule_uuid <i>optional</i>	Rule UUID Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

UpdateRule_OutputType

Name	Description	Schema
status <i>optional</i>	Status Type Example : "string"	string

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

YangUuidType

Scheduler UUID.

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

add-rule-input

Name	Description	Schema
input <i>optional</i>	Example : "AddRule_InputType"	AddRule_InputType

add-rule-output

Name	Description	Schema
output <i>optional</i>	Example : "AddRule_OutputType"	AddRule_OutputType

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

`api-access-list{id}`

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : <code>"RbacRuleEntriesType"</code>	RbacRuleEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`cancel-deployment-input`

Name	Description	Schema
input <i>optional</i>	Example : <code>"CancelDeployment_InputType"</code>	CancelDeployment_InputType

`cancel-deployment-output`

Name	Description	Schema
output <i>optional</i>	Example : <code>"CancelDeployment_OutputType"</code>	CancelDeployment_OutputType

`config-root`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`config-root{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-policy-mgmt_config-root_id_domain"]</code>	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : <code>["_csp-policy-mgmt_config-root_id_global-system-config"]</code>	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType

Name	Description	Schema
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>

delete-rule-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteRule_InputType"</code>	<code>DeleteRule_InputType</code>

delete-rule-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteRule_OutputType"</code>	<code>DeleteRule_OutputType</code>

deploy-policy-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeployPolicy_InputType"</code>	<code>DeployPolicy_InputType</code>

deploy-policy-job-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeployPolicyJob_InputType"</code>	<code>DeployPolicyJob_InputType</code>

deploy-policy-job-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeployPolicyJob_OutputType"</code>	<code>DeployPolicyJob_OutputType</code>

deploy-policy-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeployPolicy_OutputType"</code>	<code>DeployPolicy_OutputType</code>

deployment_info

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

deployment_info{id}

Name	Description	Schema
deployment_state <i>optional</i>	Deployment status. Example : "DeploymentInfoDeploymentStateType"	DeploymentInfoDeploymentStateType
deployment_timestamp <i>optional</i>	Timestamp when this policy is deployed to all sites. NOTE: this timestamp is in micro-seconds and generated via python. For details see https://docs.python.org/2/library/time.html#time.time . Example : "[_csp-policy-mgmt_xsd_unsignedlong]"	xsd:unsignedLong
device_info <i>optional</i>	Example : ["[_csp-policy-mgmt_deployment_info_id_device_info]"]	< deployment_info{id}_device_info > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
job_uuid <i>optional</i>	Job UUID. Example : "YangUuidType"	YangUuidType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
policy_diff <i>optional</i>	Example : ["[_csp-policy-mgmt_deployment_info_id_policy_diff]"]	< deployment_info{id}_policy_diff > array
policy_snapshot <i>optional</i>	Example : ["[_csp-policy-mgmt_deployment_info_id_policy_snapshot]"]	< deployment_info{id}_policy_snapshot > array
schedule_uuid <i>optional</i>	Scheduler UUID. Example : "YangUuidType"	YangUuidType

device_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

device_info{id}

Name	Description	Schema
device_policy_diff <i>optional</i>	Diff between policy snapshot taken for this device deployment and the last successful deployment. Example : "LeafrefType"	LeafrefType
device_uuid <i>optional</i>	device uuid Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string

Name	Description	Schema
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
site_uuid <i>optional</i>	Site uuid Example : "YangUuidType"	YangUuidType
task_info <i>optional</i>	Info about policy tasks associated with the device. Example : "DeviceInfoTaskInfoType"	DeviceInfoTaskInfoType

device_snapshot_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

device_snapshot_info{id}

Name	Description	Schema
device_uuid <i>optional</i>	Device UUID. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
last_successful_snapshot <i>optional</i>	UUID of Policy snapshot for last successful deployment for specified device. Example : "LeafrefType"	LeafrefType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
site_uuid <i>optional</i>	Site UUID. Example : "YangUuidType"	YangUuidType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-policy-mgmt_domain_id_api-access-list]"]	< domain{id}_api-access-list > array

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["_csp-policy-mgmt_domain_id_namespace"]</code>	<code>< domain{id}_namespace ></code> array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
project <i>optional</i>	Example : <code>["_csp-policy-mgmt_domain_id_project"]</code>	<code>< domain{id}_project ></code> array

get-dirty-policies-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetDirtyPolicies_InputType"</code>	GetDirtyPolicies_InputType

get-dirty-policies-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetDirtyPolicies_OutputType"</code>	GetDirtyPolicies_OutputType

get-effective-rules-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetEffectiveRules_InputType"</code>	GetEffectiveRules_InputType

get-effective-rules-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetEffectiveRules_OutputType"</code>	GetEffectiveRules_OutputType

get-rules-summary-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetRulesSummary_InputType"</code>	GetRulesSummary_InputType

get-rules-summary-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetRulesSummary_OutputType"</code>	<code>GetRulesSummary_OutputType</code>

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
display-name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>

intent_policy

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

intent_policy{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>
last_update_timestamp <i>optional</i>	Timestamp when this policy is updated. This timestamp is updated only when policy rules (NOT the objects used in the policy) are changed. This means that this timestamp is not updated when only referenced objects are changed. NOTE: this timestamp is in microseconds and generated via python. For details, see https://docs.python.org/2/library/time.html#time.time . Example : <code>"[_csp-policy-mgmt_xsd_unsignedlong]"</code>	<code>xsd:unsignedLong</code>
object_info <i>optional</i>	Example : <code>["_csp-policy-mgmt_intent_policy_id_object_info"]</code>	<code>< intent_policy{id}_object_info > array</code>

Name	Description	Schema
operational_info <i>optional</i>	Example : [" [_csp-policy-mgmt_intent_policy_id_operational_info] "]	< intent_policy{id}_operational_info > array
perms2 <i>optional</i>	Example : " PermType2 "	PermType2
policy_rule <i>optional</i>	Example : [" [_csp-policy-mgmt_intent_policy_id_policy_rule] "]	< intent_policy{id}_policy_rule > array
policy_type <i>optional</i>	Intent policy. Example : " LeafrefType "	LeafrefType
rule_order <i>optional</i>	Rule order is separated out from the policy_rule object and maintained in in this list (stored as a blob in Cassandra database). Two advantages with this design: 1) It is possible to have O(1) algorithm for the add-rule/delete-rule/move-rule APIs without the need to read other rules. This also take advantage of Cassandra's fast write on blobs. Even for a policy with 10K rules, this blob would be only 400KB which can be persisted quickly. 2) Because HAPI server saves this list as blob in Cassandra, atomicity is maintained and idempotency for these APIs can be achieved. Example : " IntentPolicyRuleOrderType "	IntentPolicyRuleOrderType
update_number <i>optional</i>	Update number, will be incremented when policy rule is changed. Example : " [_csp-policy-mgmt_xsd_unsignedlong] "	xsd:unsignedLong

move-rule-input

Name	Description	Schema
input <i>optional</i>	Example : " MoveRule_InputType "	MoveRule_InputType

move-rule-output

Name	Description	Schema
output <i>optional</i>	Example : " MoveRule_OutputType "	MoveRule_OutputType

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : " string "	string
uuid <i>optional</i>	Example : " string "	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : " string "	string

Name	Description	Schema
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

object_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

object_info{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
last_update_timestamp <i>optional</i>	Timestamp from last update. Example : "[_csp-policy-mgmt_xsd_unsignedlong] "	xsd:unsignedLong
object_name <i>optional</i>	Object Name. Example : "string"	string
object_type <i>optional</i>	Object type. Example : "ObjectType"	ObjectType
object_uuid <i>optional</i>	Object UUID. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
update_number <i>optional</i>	Update number for object. Example : "[_csp-policy-mgmt_xsd_unsignedlong] "	xsd:unsignedLong

object_meta_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

object_meta_info{id}

Name	Description	Schema
dirty_marker <i>optional</i>	Dirty marker. Example : "ObjectMetaInfoDirtyMarkerType"	ObjectMetaInfoDirtyMarkerType

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
micro_service_info <i>optional</i>	Microservice information. Example : "ObjectMetaInfoMicroServiceInfoType"	ObjectMetaInfoMicroServiceInfoType
object_type <i>optional</i>	Object Type. Example : "ObjectType"	ObjectType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

operational_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

operational_info{id}

Name	Description	Schema
current_deployment <i>optional</i>	Current deployment. Example : "LeafrefType"	LeafrefType
deployment_info <i>optional</i>	Example : ["[_csp-policy-mgmt_operational_info_id_deployment_info]"]	< operational_info{id}_deployment_info > array
device_snapshot_info <i>optional</i>	Example : ["[_csp-policy-mgmt_operational_info_id_device_snapshot_info]"]	< operational_info{id}_device_snapshot_info > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
last_successful_deployment <i>optional</i>	Information related to last successful deployment. Example : "LeafrefType"	LeafrefType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

policy_diff

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

`policy_diff{id}`

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
dst_snapshot <i>optional</i>	UUID of destination snapshot. Example : <code>"LeafrefType"</code>	LeafrefType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
rule_diff <i>optional</i>	Style diff between policy snapshot taken for this deployment and last successful deployment, for netconf edit-config . Example : <code>"[_csp-policy-mgmt_xsd_any]"</code>	xsd:any
src_snapshot <i>optional</i>	UUID of source snapshot. Example : <code>"LeafrefType"</code>	LeafrefType

`policy_meta_info`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`policy_meta_info{id}`

Name	Description	Schema
capability <i>optional</i>	Capabilities. Example : <code>"PolicyMetaInfoCapabilityType"</code>	PolicyMetaInfoCapabilityType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
mapper_service <i>optional</i>	Mapper service. Example : <code>"PolicyMetaInfoMapperServiceType"</code>	PolicyMetaInfoMapperServiceType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
policy_type <i>optional</i>	Policy type. Example : <code>"PolicyMetaInfoPolicyTypeType"</code>	PolicyMetaInfoPolicyTypeType
supported_dst_endpoint_objects <i>optional</i>	Supported destination endpoints. Example : <code>"LeafrefType"</code>	LeafrefType

Name	Description	Schema
supported_options <i>optional</i>	Supported options. Example : "PolicyMetaInfoSupportedOptionsType"	PolicyMetaInfoSupportedOptionsType
supported_src_endpoint_objects <i>optional</i>	Supported source endpoints. Example : "LeafrefType"	LeafrefType

policy_rule

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

policy_rule{id}

Name	Description	Schema
action <i>optional</i>	Firewall rule actions. Example : "PolicyRuleActionType"	PolicyRuleActionType
creation_timestamp <i>optional</i>	Timestamp of when this rule is created. because of its precision to the micro-second, use this timestamp to for generating an idempotent rule name. NOTE: this timestamp is in micro-seconds and generated via python. For details, see https://docs.python.org/2/library/time.html#time.time . Example : "[_csp-policy-mgmt_xsd_unsignedlong] "	xsd:unsignedLong
display-name <i>optional</i>	Example : "string"	string
dst_endpoints <i>optional</i>	Destination endpoints. Example : "LeafrefType"	LeafrefType
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
last_update_timestamp <i>optional</i>	Timestamp when this rule is updated. Example : "[_csp-policy-mgmt_xsd_unsignedlong] "	xsd:unsignedLong
object_info <i>optional</i>	Example : ["[_csp-policy-mgmt_policy_rule_id_object_info] "]	< policy_rule{id}_object_info > array
options <i>optional</i>	Options. Example : "PolicyRuleOptionsType"	PolicyRuleOptionsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
rule_description <i>optional</i>	Rule description. Example : "string"	string
sla_profile <i>optional</i>	SLA profile. Example : "LeafrefType"	LeafrefType

Name	Description	Schema
src_endpoints <i>optional</i>	Source endpoints. Example : " LeafrefType "	LeafrefType
update_number <i>optional</i>	Update number will be updated when rule is changed. Example : " [_csp-policy-mgmt_xsd_unsignedlong] "	xsd:unsignedLong

[policy_snapshot](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : " string "	string
uuid <i>optional</i>	Example : " string "	string

[policy_snapshot{id}](#)

Name	Description	Schema
display-name <i>optional</i>	Example : " string "	string
id-perms <i>optional</i>	Example : " IdPermsType "	IdPermsType
outbound_zone_info <i>optional</i>	JSON representation for storing outbound zone info. Example : " [_csp-policy-mgmt_xsd_any] "	xsd:any
perms2 <i>optional</i>	Example : " PermType2 "	PermType2
policy_update_number <i>optional</i>	Update number for the policy on which snapshot is taken. Example : " [_csp-policy-mgmt_xsd_unsignedlong] "	xsd:unsignedLong
referenced_objects <i>optional</i>	List of referenced objects for a rule, categorized per object type. Example : " PolicySnapshotReferencedObjectsType "	PolicySnapshotReferencedObjectsType
rules <i>optional</i>	Policy rules. Example : " PolicySnapshotRulesType "	PolicySnapshotRulesType

[project](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : " string "	string
uuid <i>optional</i>	Example : " string "	string

[project{id}](#)

Name	Description	Schema
api-access-list <i>optional</i>	Example : [" [_csp-policy-mgmt_project_id_api-access-list] "]	< project{id}_api-access-list > array

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
intent_policy <i>optional</i>	Example : <code>["[_csp-policy-mgmt_project_id_intent_policy]"]</code>	<code>< project{id}_intent_policy > array</code>
namespace <i>optional</i>	Example : <code>["[_csp-policy-mgmt_project_id_namespace]"]</code>	<code>< project{id}_namespace > array</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
quota <i>optional</i>	Example : <code>"QuotaType"</code>	QuotaType

update-rule-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"UpdateRule_InputType"</code>	UpdateRule_InputType

update-rule-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"UpdateRule_OutputType"</code>	UpdateRule_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
es-schema <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
json-schema <i>optional</i>	Example : <code>"string"</code>	string
module-name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.11. Policy and SLA Management Service

9.11.1. Overview

Policy and SLA profile object management service to enable software defined wan (SDWAN) functions.

Version information

Version : 3.0

URI scheme

BasePath : /pslam

Schemes : HTTP

Tags

- app-group : app-group
- sla_to_vrf_mapping : SLA to VRF Mapping
- link_monitor_info : SLA monitoring status for a given link
- sla : sla
- get_sla_history : This RPC is used to fetch the historical data for a given SLA
- get_sla_by_uuids : This RPC can be used to get complete details of SLA objects, as per the input uuid list.
- get_app_sla_mappings : This RPC can be used query the Application-Sla mappings
- application : application
- sla_mgmt_info : Maintain SLA management information for a device
- category : category
- app_operational_info : app operational info
- policy_def : policy
- rules_operational_info : rules operational info
- policy_operational_info : policy operational info
- job : Entity used to track the status of the submitted,running,completed or failed job
- sla_archive : Historical changes to SLA profile are tracked here

Produces

- `application/json`

9.11.2. Resources

App-group

app-group

Add a new app-group

```
POST /pslam/app-group
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>app-group{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>app-group{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app-group"
```

Request body

```

{
  "group_id" : "string",
  "group_description" : "string",
  "group_type" : { },
  "group_device_specific_name" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ]
}

```

Example HTTP response

Response 200


```

{
  "group_id" : "string",
  "group_description" : "string",
  "group_type" : { },
  "group_device_specific_name" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ]
}

```

Get the app-group list

```
GET /pslam/app-group
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< app-group > array

Example HTTP request

Request path

```
"/pslam/app-group"
```

Example HTTP response

Response 200

```
"array"
```

Get a single app-group

```
GET /pslam/app-group/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	app-group{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app-group/0"
```

Example HTTP response

Response 200

```
{
  "group_id" : "string",
  "group_description" : "string",
  "group_type" : { },
  "group_device_specific_name" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ]
}
```

Update app-group information

```
PUT /pslam/app-group/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	app-group{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app-group/0"
```

Example HTTP response

Response 200

```

{
  "group_id" : "string",
  "group_description" : "string",
  "group_type" : { },
  "group_device_specific_name" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ]
}

```

Delete a single app-group

```
DELETE /pslam/app-group/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app-group/0"
```

App_operational_info

app operational info

Add a new app_operational_info

```
POST /pslam/app_operational_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		app_operational_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	app_operational_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app_operational_info"
```

Request body

```

{
  "status" : { },
  "site_info" : {
    "site_id" : "string",
    "device_id" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ],
  "category" : [ null ]
}

```

Example HTTP response

Response 200


```

{
  "status" : { },
  "site_info" : {
    "site_id" : "string",
    "device_id" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ],
  "category" : [ null ]
}

```

Get the app_operational_info list

```
GET /pslam/app_operational_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< app_operational_info > array

Example HTTP request

Request path

```
"/pslam/app_operational_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single app_operational_info

```
GET /pslam/app_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	app_operational_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app_operational_info/0"
```

Example HTTP response

Response 200

```

{
  "status" : { },
  "site_info" : {
    "site_id" : "string",
    "device_id" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ],
  "category" : [ null ]
}

```

Update app_operational_info information

```
PUT /pslam/app_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	app_operational_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app_operational_info/0"
```

Example HTTP response

Response 200

```

{
  "status" : { },
  "site_info" : {
    "site_id" : "string",
    "device_id" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "application" : [ null ],
  "app-group" : [ null ],
  "category" : [ null ]
}

```

Delete a single app_operational_info

```
DELETE /pslam/app_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/app_operational_info/0"
```

Application

application

Add a new application

```
POST /pslam/application
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>application{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>application{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/application"
```

Request body

```
{
  "app_id" : "string",
  "app_device_specific_name" : "string",
  "app_description" : "string",
  "app_type" : { },
  "custom_application" : {
    "custom_app_type" : "string",
    "icmp_based" : "<<_csp-pslam_customapplicationicmpbasedtype>>",
    "ip_protocol_based" : "<<_csp-pslam_customapplicationipprotocolbasedtype>>",
    "address_based" : {
      "address_list" : {
        "address_name" : "string",
        "ip" : "string",
        "port_range" : {
          "port_id" : "string",
          "protocol" : "string",
          "start_port" : 0,
          "end_port" : 0
        }
      }
    }
  },
  "signature_based" : {
    "signature_protocol" : {
      "signature_protocol" : "string",
      "signature" : {
        "signature_name" : "string",
        "port_range" : {
```



```

        "port_id" : "string",
        "protocol" : "string",
        "start_port" : 0,
        "end_port" : 0
    },
    "member" : {
        "member_name" : "string",
        "direction" : "string",
        "pattern" : "string",
        "context" : "string"
    }
}
}
},
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string",
"category" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "app_id" : "string",
  "app_device_specific_name" : "string",
  "app_description" : "string",
  "app_type" : { },
  "custom_application" : {
    "custom_app_type" : "string",
    "icmp_based" : "<<_csp-pslam_customapplicationicmpbasedtype>>",
    "ip_protocol_based" : "<<_csp-pslam_customapplicationipprotocolbasedtype>>",
    "address_based" : {
      "address_list" : {
        "address_name" : "string",
        "ip" : "string",
        "port_range" : {
          "port_id" : "string",
          "protocol" : "string",
          "start_port" : 0,
          "end_port" : 0
        }
      }
    }
  },
  "signature_based" : {
    "signature_protocol" : {
      "signature_protocol" : "string",
      "signature" : {
        "signature_name" : "string",
        "port_range" : {
          "port_id" : "string",
          "protocol" : "string",
          "start_port" : 0,
          "end_port" : 0
        }
      },
      "member" : {
        "member_name" : "string",
        "direction" : "string",
        "pattern" : "string",
        "context" : "string"
      }
    }
  },
  "id-perms" : {

```

```
"permissions" : {
  "owner" : "string",
  "owner_access" : 0,
  "group" : "string",
  "group_access" : 0,
  "other_access" : 0
},
"uuid" : {
  "uuid_mslong" : 0,
  "uuid_lslong" : 0
},
"enable" : true,
"description" : "string",
"user-visible" : true,
"creator" : "string",
"modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"category" : [ null ]
}
```

Get the application list

```
GET /pslam/application
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< application > array

Example HTTP request

Request path

```
"/pslam/application"
```

Example HTTP response

Response 200

```
"array"
```

Get a single application

```
GET /pslam/application/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	application{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/application/0"
```

Example HTTP response

Response 200

```
{
  "app_id" : "string",
  "app_device_specific_name" : "string",
  "app_description" : "string",
  "app_type" : { },
  "custom_application" : {
```

```

"custom_app_type" : "string",
"icmp_based" : "<<_csp-pslam_customapplicationicmpbasedtype>>",
"ip_protocol_based" : "<<_csp-pslam_customapplicationipprotocolbasedtype>>",
"address_based" : {
  "address_list" : {
    "address_name" : "string",
    "ip" : "string",
    "port_range" : {
      "port_id" : "string",
      "protocol" : "string",
      "start_port" : 0,
      "end_port" : 0
    }
  }
},
"signature_based" : {
  "signature_protocol" : {
    "signature_protocol" : "string",
    "signature" : {
      "signature_name" : "string",
      "port_range" : {
        "port_id" : "string",
        "protocol" : "string",
        "start_port" : 0,
        "end_port" : 0
      }
    }
  },
  "member" : {
    "member_name" : "string",
    "direction" : "string",
    "pattern" : "string",
    "context" : "string"
  }
}
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  }
}

```

```

    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "category" : [ null ]
}

```

Update application information

PUT /pslam/application/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	application{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/application/0"
```

Example HTTP response

Response 200

```
{
  "app_id" : "string",
  "app_device_specific_name" : "string",
  "app_description" : "string",
  "app_type" : { },
  "custom_application" : {
    "custom_app_type" : "string",
    "icmp_based" : "<<_csp-pslam_customapplicationicmpbasedtype>>",
    "ip_protocol_based" : "<<_csp-pslam_customapplicationipprotocolbasedtype>>",
    "address_based" : {
      "address_list" : {
        "address_name" : "string",
        "ip" : "string",
        "port_range" : {
          "port_id" : "string",
          "protocol" : "string",
          "start_port" : 0,
          "end_port" : 0
        }
      }
    },
    "signature_based" : {
      "signature_protocol" : {
        "signature_protocol" : "string",
        "signature" : {
          "signature_name" : "string",
          "port_range" : {
            "port_id" : "string",
            "protocol" : "string",
            "start_port" : 0,
            "end_port" : 0
          }
        }
      },
      "member" : {
        "member_name" : "string",
        "direction" : "string",
        "pattern" : "string",

```

```

        "context" : "string"
    }
}
}
},
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string",
"category" : [ null ]
}

```

Delete a single application

```
DELETE /pslam/application/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/application/0"
```

Category

category

Add a new category

```
POST /pslam/category
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>category{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>category{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/category"
```

Request body

```

{
  "cat_description" : "string",
  "cat_id" : "string",
  "cat_type" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "cat_description" : "string",
  "cat_id" : "string",
  "cat_type" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the category list

```
GET /pslam/category
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< category > array

Example HTTP request

Request path

```
"/pslam/category"
```

Example HTTP response

Response 200

```
"array"
```

Get a single category

```
GET /pslam/category/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	category{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/category/0"
```

Example HTTP response

Response 200

```
{
  "cat_description" : "string",
  "cat_id" : "string",
  "cat_type" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update category information

```
PUT /pslam/category/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	category{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/category/0"
```

Example HTTP response

Response 200

```
{
  "cat_description" : "string",
  "cat_id" : "string",
  "cat_type" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single category

```
DELETE /pslam/category/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/category/0"
```

Get_app_sla_mappings

This RPC can be used query the Application-Sla mappings

Execute get_app_sla_mappings RPC

```
POST /pslam/get_app_sla_mappings
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_app_sla_mappings-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_app_sla_mappings-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/get_app_sla_mappings"
```

Request body

```
{
  "input" : {
    "detail" : true,
    "tenant" : "string",
    "site_uuids" : "string",
    "sla_ids" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "mappings" : [ {
      "sites" : {
        "site_uuid" : "string",
        "devices" : {
          "device_uuid" : "string",
          "slas" : {
            "sla_id" : "string",
            "app_list" : "string",
            "app_group_list" : "string"
          }
        }
      }
    } ]
  }
}
```

Get_sla_by_uuids

This RPC can be used to get complete details of SLA objects, as per the input uuid list.

Execute get_sla_by_uuids RPC

```
POST /pslam/get_sla_by_uuids
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_sla_by_uuids-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_sla_by_uuids-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/get_sla_by_uuids"
```

Request body

```
{
  "input" : {
    "object_uuids" : "string",
    "detail" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : "<<_csp-pslam_getslabyuuids_outputtype>>"
}
```

Get_sla_history

This RPC is used to fetch the historical data for a given SLA

Execute get_sla_history RPC

```
POST /pslam/get_sla_history
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_sla_history- input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_sla_history- output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/get_sla_history"
```

Request body

```
{
  "input" : {
    "sla_id" : "string",
    "from_time" : 0,
    "to_time" : 0
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "objects" : [ {
      "start_time" : 0,
      "end_time" : 0,
      "sla_archive" : {
        "sla_id" : "string",
        "description" : "string",
        "update_number" : 0,
        "constraints" : {
          "latency" : "<<_csp-pslam_constraintslatencytype>>",
          "delay" : "<<_csp-pslam_constraintsdelaytype>>",
          "jitter" : "<<_csp-pslam_constraintsjittertype>>",
          "loss" : "<<_csp-pslam_constraintslosstype>>",
          "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
        },
        "CoS" : "string",
        "link" : "string",
        "upload_rate_limiter" : {
          "bandwidth_limit" : 0,
          "burst_size_limit" : 0
        },
        "download_rate_limiter" : {
          "bandwidth_limit" : 0,
          "burst_size_limit" : 0
        }
      }
    } ]
  }
}
```

Job

Entity used to track the status of the submitted,running,completed or failed job

[Add a new job](#)

```
POST /pslam/job
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>job{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>job{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/job"
```

Request body

```

{
  "state" : "string",
  "job-type" : "string",
  "job-info" : "string",
  "job-instance-uuid" : { },
  "job-data" : {
    "job-data" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "state" : "string",
  "job-type" : "string",
  "job-info" : "string",
  "job-instance-uuid" : { },
  "job-data" : {
    "job-data" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the job list

```
GET /pslam/job
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< job > array

Example HTTP request

Request path

```
"/pslam/job"
```

Example HTTP response

Response 200

```
"array"
```

Get a single job

```
GET /pslam/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	job{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/job/0"
```

Example HTTP response

Response 200

```
{
  "state" : "string",
  "job-type" : "string",
  "job-info" : "string",
  "job-instance-uuid" : { },
  "job-data" : {
    "job-data" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update job information

```
PUT /pslam/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	job{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/job/0"
```

Example HTTP response

Response 200

```

{
  "state" : "string",
  "job-type" : "string",
  "job-info" : "string",
  "job-instance-uuid" : { },
  "job-data" : {
    "job-data" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single job

```
DELETE /pslam/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/job/0"
```

Link_monitor_info

SLA monitoring status for a given link

Add a new link_monitor_info

```
POST /pslam/link_monitor_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		link_monitor_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	link_monitor_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/link_monitor_info"
```

Request body

```

{
  "site" : { },
  "device" : { },
  "probe" : "string",
  "link" : { },
  "link_name" : "string",
  "network" : { },
  "state" : "string",
  "info" : "string",
  "bandwidth" : "<<_csp-pslam_xsd_unsignedlong>>",
  "metrics" : {
    "name" : "string",
    "value" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200


```

{
  "site" : { },
  "device" : { },
  "probe" : "string",
  "link" : { },
  "link_name" : "string",
  "network" : { },
  "state" : "string",
  "info" : "string",
  "bandwidth" : "<<_csp-pslam_xsd_unsignedlong>>",
  "metrics" : {
    "name" : "string",
    "value" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the link_monitor_info list

```
GET /pslam/link_monitor_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< link_monitor_info > array

Example HTTP request

Request path

```
"/pslam/link_monitor_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single link_monitor_info

```
GET /pslam/link_monitor_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	link_monitor_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/link_monitor_info/0"
```

Example HTTP response

Response 200

```

{
  "site" : { },
  "device" : { },
  "probe" : "string",
  "link" : { },
  "link_name" : "string",
  "network" : { },
  "state" : "string",
  "info" : "string",
  "bandwidth" : "<<_csp-pslam_xsd_unsignedlong>>",
  "metrics" : {
    "name" : "string",
    "value" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update link_monitor_info information

```
PUT /pslam/link_monitor_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	link_monitor_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/link_monitor_info/0"
```

Example HTTP response

Response 200

```

{
  "site" : { },
  "device" : { },
  "probe" : "string",
  "link" : { },
  "link_name" : "string",
  "network" : { },
  "state" : "string",
  "info" : "string",
  "bandwidth" : "<<_csp-pslam_xsd_unsignedlong>>",
  "metrics" : {
    "name" : "string",
    "value" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single link_monitor_info

```
DELETE /pslam/link_monitor_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/link_monitor_info/0"
```

Policy_def

policy

Add a new policy_def

```
POST /pslam/policy_def
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		policy_def{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_def{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_def"
```

Request body

```
{
  "policy_id" : "string",
  "order" : "<<_csp-pslam_xsd_unsignedlong>>",
  "policy_match" : {
    "department" : "string",
    "app_refs" : [ {
      "to" : "string",
      "href" : "string",
      "id" : "string"
    } ],
    "appgroup_refs" : [ {
      "to" : "string",
      "href" : "string",
      "id" : "string"
    } ]
  },
  "policy_action" : {
    "sla_profile" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
```



```

    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "policy_id" : "string",
  "order" : "<<_csp-pslam_xsd_unsignedlong>>",
  "policy_match" : {
    "department" : "string",
    "app_refs" : [ {
      "to" : "string",
      "href" : "string",
      "id" : "string"
    } ],
    "appgroup_refs" : [ {
      "to" : "string",
      "href" : "string",
      "id" : "string"
    } ]
  },
  "policy_action" : {
    "sla_profile" : "string"
  }
}

```

```
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Get the policy_def list

GET /pslam/policy_def

Responses

HTTP Code	Description	Schema
200	Successful operation	< policy_def > array

Example HTTP request

Request path

```
"/pslam/policy_def"
```

Example HTTP response

Response 200

```
"array"
```

Get a single policy_def

```
GET /pslam/policy_def/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_def{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_def/0"
```

Example HTTP response

Response 200

```
{  
  "policy_id" : "string",  
}
```

```

"order" : "<<_csp-pslam_xsd_unsignedlong>>",
"policy_match" : {
  "department" : "string",
  "app_refs" : [ {
    "to" : "string",
    "href" : "string",
    "id" : "string"
  } ],
  "appgroup_refs" : [ {
    "to" : "string",
    "href" : "string",
    "id" : "string"
  } ]
},
"policy_action" : {
  "sla_profile" : "string"
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Update policy_def information

```
PUT /pslam/policy_def/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_def{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_def/0"
```

Example HTTP response

Response 200

```
{
  "policy_id" : "string",
  "order" : "<<_csp-pslam_xsd_unsignedlong>>",
  "policy_match" : {
    "department" : "string",
    "app_refs" : [ {
      "to" : "string",
      "href" : "string",
      "id" : "string"
    } ],
    "appgroup_refs" : [ {
```

```

        "to" : "string",
        "href" : "string",
        "id" : "string"
    } ]
},
"policy_action" : {
    "sla_profile" : "string"
},
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string"
}

```

Delete a single policy_def

```
DELETE /pslam/policy_def/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_def/0"
```

Policy_operational_info

policy operational info

Add a new policy_operational_info

```
POST /pslam/policy_operational_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		policy_operational_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_operational_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_operational_info"
```

Request body


```

{
  "policy_id" : "string",
  "device_info" : {
    "site_id" : "string",
    "device_id" : "string",
    "enable_hub_spoke_mode" : true,
    "job_id" : "string",
    "policy_status" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "policy_id" : "string",
  "device_info" : {
    "site_id" : "string",
    "device_id" : "string",
    "enable_hub_spoke_mode" : true,
    "job_id" : "string",
    "policy_status" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the policy_operational_info list

```
GET /pslam/policy_operational_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< policy_operational_info > array

Example HTTP request

Request path

```
"/pslam/policy_operational_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single policy_operational_info

```
GET /pslam/policy_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_operational_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_operational_info/0"
```

Example HTTP response

Response 200

```

{
  "policy_id" : "string",
  "device_info" : {
    "site_id" : "string",
    "device_id" : "string",
    "enable_hub_spoke_mode" : true,
    "job_id" : "string",
    "policy_status" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update policy_operational_info information

```
PUT /pslam/policy_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	policy_operational_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_operational_info/0"
```

Example HTTP response

Response 200

```

{
  "policy_id" : "string",
  "device_info" : {
    "site_id" : "string",
    "device_id" : "string",
    "enable_hub_spoke_mode" : true,
    "job_id" : "string",
    "policy_status" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single policy_operational_info

```
DELETE /pslam/policy_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/policy_operational_info/0"
```

Rules_operational_info

rules operational info

Add a new rules_operational_info

```
POST /pslam/rules_operational_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		rules_operational_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	rules_operational_info{id}
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/rules_operational_info"
```

Request body

```
{
  "rule_id" : "string",
  "rule_name" : "string",
  "policy_profile" : "string",
  "topo_device_id" : { },
  "sla_id" : "string",
  "policy_id" : "string",
  "rule_property_1" : "string",
  "rule_property_2" : "string",
  "rule_property_3" : "string",
  "site_id" : { },
  "device_name" : "string",
  "rule_enforcement_status" : { },
  "app_list" : {
    "app_uuid" : "string",
    "app_name" : "string"
  },
  "app_group_list" : {
    "app_group_uuid" : "string",
    "app_group_name" : "string"
  },
  "spoke_device_list" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
```

```

    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "rule_id" : "string",
  "rule_name" : "string",
  "policy_profile" : "string",
  "topo_device_id" : { },
  "sla_id" : "string",
  "policy_id" : "string",
  "rule_property_1" : "string",
  "rule_property_2" : "string",
  "rule_property_3" : "string",
  "site_id" : { },
  "device_name" : "string",
  "rule_enforcement_status" : { },
  "app_list" : {
    "app_uuid" : "string",
    "app_name" : "string"
  }
},

```

```
"app_group_list" : {
  "app_group_uuid" : "string",
  "app_group_name" : "string"
},
"spoke_device_list" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Get the rules_operational_info list

```
GET /pslam/rules_operational_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< rules_operational_info > array

Example HTTP request

Request path

```
"/pslam/rules_operational_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single rules_operational_info

```
GET /pslam/rules_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rules_operational_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/rules_operational_info/0"
```

Example HTTP response

Response 200

```
{
  "rule_id" : "string",
  "rule_name" : "string",
  "policy_profile" : "string",
  "topo_device_id" : { },
  "sla_id" : "string",
  "policy_id" : "string",
  "rule_property_1" : "string",
  "rule_property_2" : "string",
  "rule_property_3" : "string",
  "site_id" : { },
  "device_name" : "string",
  "rule_enforcement_status" : { },
  "app_list" : {
    "app_uuid" : "string",
    "app_name" : "string"
  },
  "app_group_list" : {
    "app_group_uuid" : "string",
    "app_group_name" : "string"
  },
  "spoke_device_list" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
```

```
"global-access" : 0,
"share" : [ {
  "tenant" : "string",
  "tenant_access" : 0
} ]
},
"display-name" : "string"
}
```

Update rules_operational_info information

```
PUT /pslam/rules_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	rules_operational_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/rules_operational_info/0"
```

Example HTTP response

Response 200

```
{
```

```

"rule_id" : "string",
"rule_name" : "string",
"policy_profile" : "string",
"topo_device_id" : { },
"sla_id" : "string",
"policy_id" : "string",
"rule_property_1" : "string",
"rule_property_2" : "string",
"rule_property_3" : "string",
"site_id" : { },
"device_name" : "string",
"rule_enforcement_status" : { },
"app_list" : {
  "app_uuid" : "string",
  "app_name" : "string"
},
"app_group_list" : {
  "app_group_uuid" : "string",
  "app_group_name" : "string"
},
"spoke_device_list" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
} ]

```

```
    },
    "display-name" : "string"
  }
```

Delete a single rules_operational_info

```
DELETE /pslam/rules_operational_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/rules_operational_info/0"
```

Sla

sla

Add a new sla

```
POST /pslam/sla
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		sla{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla"
```

Request body

```
{
  "sla_id" : "string",
  "description" : "string",
  "update_number" : 0,
  "priority" : "<<_csp-pslam_xsd_unsignedshort>>",
  "constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",
    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
  },
  "CoS" : "string",
  "link" : "string",
  "upload_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
}
```

```

"download_rate_limiter" : {
  "bandwidth_limit" : 0,
  "burst_size_limit" : 0
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"sla_archive" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "sla_id" : "string",
  "description" : "string",
  "update_number" : 0,
  "priority" : "<<_csp-pslam_xsd_unsignedshort>>",
  "constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",

```

```

    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthrthroughputtype>>"
  },
  "CoS" : "string",
  "link" : "string",
  "upload_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "download_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "sla_archive" : [ null ]
}

```

Get the sla list

```
GET /pslam/sla
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< sla > array

Example HTTP request

Request path

```
"/pslam/sla"
```

Example HTTP response

Response 200

```
"array"
```

Get a single sla

```
GET /pslam/sla/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla/0"
```

Example HTTP response

Response 200

```
{
  "sla_id" : "string",
  "description" : "string",
  "update_number" : 0,
  "priority" : "<<_csp-pslam_xsd_unsignedshort>>",
  "constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",
    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
  },
  "CoS" : "string",
  "link" : "string",
  "upload_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "download_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
```

```

    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "sla_archive" : [ null ]
}

```

Update sla information

```
PUT /pslam/sla/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla/0"
```

Example HTTP response

Response 200

```
{
  "sla_id" : "string",
  "description" : "string",
  "update_number" : 0,
  "priority" : "<<_csp-pslam_xsd_unsignedshort>>",
  "constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",
    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
  },
  "CoS" : "string",
  "link" : "string",
  "upload_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "download_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
}
```

```

"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"sla_archive" : [ null ]
}

```

Delete a single sla

```
DELETE /pslam/sla/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla/0"
```

Sla_archive

Historical changes to SLA profile are tracked here

[Add a new sla_archive](#)

```
POST /pslam/sla_archive
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		sla_archive{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_archive{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_archive"
```

Request body

```
{
  "sla_id" : "string",
  "description" : "string",
  "update_number" : 0,
  "priority" : "<<_csp-pslam_xsd_unsignedshort>>",
  "constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",
    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
  },
}
```

```

"CoS" : "string",
"link" : "string",
"upload_rate_limiter" : {
  "bandwidth_limit" : 0,
  "burst_size_limit" : 0
},
"download_rate_limiter" : {
  "bandwidth_limit" : 0,
  "burst_size_limit" : 0
},
"start_time" : "<<_csp-pslam_xsd_unsignedlong>>",
"end_time" : "<<_csp-pslam_xsd_unsignedlong>>",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
```

```

"sla_id" : "string",
"description" : "string",
"update_number" : 0,
"priority" : "<<_csp-pslam_xsd_unsignedshort>>",
"constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",
    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
},
"CoS" : "string",
"link" : "string",
"upload_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
},
"download_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
},
"start_time" : "<<_csp-pslam_xsd_unsignedlong>>",
"end_time" : "<<_csp-pslam_xsd_unsignedlong>>",
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",

```

```

    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Get the sla_archive list

```
GET /pslam/sla_archive
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< sla_archive > array

Example HTTP request

Request path

```
"/pslam/sla_archive"
```

Example HTTP response

Response 200

```
"array"
```

Get a single sla_archive

```
GET /pslam/sla_archive/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_archive{id}
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_archive/0"
```

Example HTTP response

Response 200

```
{
  "sla_id" : "string",
  "description" : "string",
  "update_number" : 0,
  "priority" : "<<_csp-pslam_xsd_unsignedshort>>",
  "constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",
    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
  },
  "CoS" : "string",
  "link" : "string",
  "upload_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "download_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "start_time" : "<<_csp-pslam_xsd_unsignedlong>>",
  "end_time" : "<<_csp-pslam_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
```

```

    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Update sla_archive information

PUT /pslam/sla_archive/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_archive{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_archive/0"
```

Example HTTP response

Response 200

```
{
  "sla_id" : "string",
  "description" : "string",
  "update_number" : 0,
  "priority" : "<<_csp-pslam_xsd_unsignedshort>>",
  "constraints" : {
    "latency" : "<<_csp-pslam_constraintslatencytype>>",
    "delay" : "<<_csp-pslam_constraintsdelaytype>>",
    "jitter" : "<<_csp-pslam_constraintsjittertype>>",
    "loss" : "<<_csp-pslam_constraintslosstype>>",
    "throughput" : "<<_csp-pslam_constraintsthroughputtype>>"
  },
  "CoS" : "string",
  "link" : "string",
  "upload_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "download_rate_limiter" : {
    "bandwidth_limit" : 0,
    "burst_size_limit" : 0
  },
  "start_time" : "<<_csp-pslam_xsd_unsignedlong>>",
  "end_time" : "<<_csp-pslam_xsd_unsignedlong>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,

```

```

    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Delete a single sla_archive

```
DELETE /pslam/sla_archive/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_archive/0"
```

Sla_mgmt_info

Maintain SLA management information for a device

Add a new sla_mgmt_info

```
POST /pslam/sla_mgmt_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		sla_mgmt_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_mgmt_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_mgmt_info"
```

Request body

```
{
  "site" : { },
  "sla_id" : "string",
  "device" : { },
  "network" : { },
  "link" : { },
  "violation" : { },
  "start_time" : "string",
  "start_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "end_time" : "string",
  "inactive" : "<<_csp-pslam_xsd_unsignedshort>>",
  "link_switch_inprogress" : "<<_csp-pslam_xsd_boolean>>",
  "end_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "last_outage_duration" : "<<_csp-pslam_xsd_unsignedlong>>",
  "constraints" : {
    "name" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
```

```

    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"link_monitor_info" : [ null ],
"sla_to_vrf_mapping" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "site" : { },
  "sla_id" : "string",
  "device" : { },
  "network" : { },
  "link" : { },
  "violation" : { },
  "start_time" : "string",
  "start_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "end_time" : "string",
  "inactive" : "<<_csp-pslam_xsd_unsignedshort>>",
  "link_switch_inprogress" : "<<_csp-pslam_xsd_boolean>>",
  "end_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "last_outage_duration" : "<<_csp-pslam_xsd_unsignedlong>>",
  "constraints" : {
    "name" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },

```

```
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"link_monitor_info" : [ null ],
"sla_to_vrf_mapping" : [ null ]
}
```

Get the sla_mgmt_info list

```
GET /pslam/sla_mgmt_info
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< sla_mgmt_info > array

Example HTTP request

Request path

```
"/pslam/sla_mgmt_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single sla_mgmt_info

```
GET /pslam/sla_mgmt_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_mgmt_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_mgmt_info/0"
```

Example HTTP response

Response 200

```
{
  "site" : { },
  "sla_id" : "string",
  "device" : { },
  "network" : { },
  "link" : { },
  "violation" : { },
  "start_time" : "string",
  "start_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "end_time" : "string",
  "inactive" : "<<_csp-pslam_xsd_unsignedshort>>",
  "link_switch_inprogress" : "<<_csp-pslam_xsd_boolean>>",
  "end_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "last_outage_duration" : "<<_csp-pslam_xsd_unsignedlong>>",
  "constraints" : {
    "name" : "string"
  },
  "id-perms" : {
    "permissions" : {
```

```

    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"link_monitor_info" : [ null ],
"sla_to_vrf_mapping" : [ null ]
}

```

Update sla_mgmt_info information

```
PUT /pslam/sla_mgmt_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_mgmt_info{id}
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_mgmt_info/0"
```

Example HTTP response

Response 200

```
{
  "site" : { },
  "sla_id" : "string",
  "device" : { },
  "network" : { },
  "link" : { },
  "violation" : { },
  "start_time" : "string",
  "start_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "end_time" : "string",
  "inactive" : "<<_csp-pslam_xsd_unsignedshort>>",
  "link_switch_inprogress" : "<<_csp-pslam_xsd_boolean>>",
  "end_time_utc" : "<<_csp-pslam_xsd_unsignedlong>>",
  "last_outage_duration" : "<<_csp-pslam_xsd_unsignedlong>>",
  "constraints" : {
    "name" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    }
  },
}
```

```

"uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
},
"enable" : true,
"description" : "string",
"user-visible" : true,
"creator" : "string",
"modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string",
"link_monitor_info" : [ null ],
"sla_to_vrf_mapping" : [ null ]
}

```

Delete a single sla_mgmt_info

```
DELETE /pslam/sla_mgmt_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_mgmt_info/0"
```

Sla_to_vrf_mapping

SLA to VRF Mapping

Add a new sla_to_vrf_mapping

```
POST /pslam/sla_to_vrf_mapping
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		sla_to_vrf_mapping {id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_to_vrf_mapping {id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_to_vrf_mapping"
```

Request body

```
{
  "sla_id" : "string",
  "vrf_index" : "<<_csp-pslam_xsd_unsignedbyte>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "sla" : [ null ]
}
```

Example HTTP response

Response 200

```
{
  "sla_id" : "string",
  "vrf_index" : "<<_csp-pslam_xsd_unsignedbyte>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "sla" : [ null ]
}
```

Get the sla_to_vrf_mapping list

```
GET /pslam/sla_to_vrf_mapping
```

Responses

HTTP Code	Description	Schema
200	Successful operation	<sla_to_vrf_mapping> array

Example HTTP request

Request path

```
"/pslam/sla_to_vrf_mapping"
```

Example HTTP response

Response 200

```
"array"
```

Get a single sla_to_vrf_mapping

```
GET /pslam/sla_to_vrf_mapping/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_to_vrf_mapping {id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_to_vrf_mapping/0"
```

Example HTTP response

Response 200

```
{
  "sla_id" : "string",
  "vrf_index" : "<<_csp-pslam_xsd_unsignedbyte>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "sla" : [ null ]
}
```

Update sla_to_vrf_mapping information

```
PUT /pslam/sla_to_vrf_mapping/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	sla_to_vrf_mapping {id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_to_vrf_mapping/0"
```

Example HTTP response

Response 200

```

{
  "sla_id" : "string",
  "vrf_index" : "<<_csp-pslam_xsd_unsignedbyte>>",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "sla" : [ null ]
}

```

Delete a single sla_to_vrf_mapping

```

DELETE /pslam/sla_to_vrf_mapping/{id0}

```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/pslam/sla_to_vrf_mapping/0"
```

9.11.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

AddressBasedAddressListType

Name	Description	Schema
address_name <i>optional</i>	Address name Example : "string"	string
ip <i>optional</i>	IP address and prefix-length Example : "string"	string

Name	Description	Schema
port_range <i>optional</i>	Example : "AddressListPortRangeType"	AddressListPortRangeType

[AddressListPortRangeType](#)

Name	Description	Schema
end_port <i>optional</i>	end port Example : 0	integer(int32)
port_id <i>optional</i>	port id, construct the id as protocol-start_port-end_port Example : "string"	string
protocol <i>optional</i>	Transport protocol Example : "string"	enum (tcp, udp)
start_port <i>optional</i>	start port Example : 0	integer(int32)

[AppGroupGroupType](#)

custom/predefined

Type : enum (CUSTOM, PREDEFINED)

[AppOperationalInfoSiteInfoType](#)

Name	Description	Schema
device_id <i>optional</i>	device information Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
site_id <i>optional</i>	Value representing site-id it belongs Example : "string"	string

[AppOperationalInfoStatusType](#)

Type : enum (ENABLED, DISABLED, FAILED, NOT_APPLICABLE)

[ApplicationAppType](#)

custom/predefined

Type : enum (CUSTOM, PREDEFINED)

[ApplicationCustomApplicationType](#)

Name	Description	Schema
address_based <i>optional</i>	Example : "CustomApplicationAddressBasedType"	CustomApplicationAddressBasedType
custom_app_type <i>required</i>	Custom application to be matched. Example : "string"	enum (icmp-based, ip-protocol-based, address-based, signature-based)

Name	Description	Schema
icmp_based <i>optional</i>	Example : "[_csp-pslam_customapplicationicmpbasedtype] "	CustomApplicationIcmpBasedType
ip_protocol_based <i>optional</i>	Example : "[_csp-pslam_customapplicationipprotocolbasedtype] "	CustomApplicationIpProtocolBasedType
signature_based <i>optional</i>	Example : "CustomApplicationSignatureBasedType"	CustomApplicationSignatureBasedType

CategoryCatTypeType

custom/predefined

Type : enum (CUSTOM, PREDEFINED)

CustomApplicationAddressBasedType

Name	Description	Schema
address_list <i>optional</i>	Example : "AddressBasedAddressListType"	AddressBasedAddressListType

CustomApplicationSignatureBasedType

Name	Description	Schema
signature_protocol <i>optional</i>	Example : "SignatureBasedSignatureProtocolType"	SignatureBasedSignatureProtocolType

DeployPolicyInputDeviceDiffInfosType

Name	Description	Schema
device_uuid <i>optional</i>	device uuid Example : "string"	string
diff_uuid <i>optional</i>	diff uuid Example : "string"	string
site_uuid <i>optional</i>	site uuid Example : "string"	string

DeployPolicyOutputDeviceInfosType

Name	Description	Schema
device_uuid <i>optional</i>	device uuid Example : "string"	string
site_uuid <i>optional</i>	site uuid Example : "string"	string
task_info <i>optional</i>	Example : "DeviceInfosTaskInfoType"	DeviceInfosTaskInfoType

DeployPolicy_InputType

Name	Description	Schema
current_policy_snapshot_uuid <i>required</i>	current policy snapshot uuid Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
device_diff_infos <i>optional</i>	Example : ["DeployPolicyInputDeviceDiffInfosType"]	< DeployPolicyInputDeviceDiffInfosType > array
policy_uuid <i>optional</i>	policy id Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeployPolicy_OutputType

Name	Description	Schema
device_infos <i>optional</i>	Example : ["DeployPolicyOutputDeviceInfosType"]	< DeployPolicyOutputDeviceInfosType > array
status <i>required</i>	status of deploy policy Example : "string"	enum (CLEAR, ERROR)

DeviceInfosTaskInfoType

Name	Description	Schema
task_path <i>optional</i>	Task path associated with this device Example : "string"	string
task_uuid <i>optional</i>	task uuid Example : "string"	string

DevicesSlasType

Name	Description	Schema
app_group_list <i>optional</i>	List of application groups JSON format Example : "string"	string
app_list <i>optional</i>	List of application JSON format Example : "string"	string
sla_id <i>optional</i>	Sla profile name Example : "string"	string

DisableCustomAppGroupInputAppGroupCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string

Name	Description	Schema
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

DisableCustomAppGroupInputSiteInfoType

Name	Description	Schema
device_id <i>optional</i>	device information Example : "string"	string
site_id <i>optional</i>	site id Example : "string"	string

DisableCustomAppGroup_InputType

Name	Description	Schema
app_group_ctx <i>optional</i>	Example : "DisableCustomAppGroupInputAppGroupCtxType"	DisableCustomAppGroupInputAppGroupCtxType
group_id <i>required</i>	App group id Example : "string"	string
site_info <i>required</i>	Example : ["DisableCustomAppGroupInputSiteInfoType"]	< DisableCustomAppGroupInputSiteInfoType > array

DisableCustomAppGroup_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id of the rpc. Caller will be using this to track the notification Example : "string"	string
status <i>optional</i>	status of rpc Example : "string"	enum (CLEAR, ERROR)

DisableCustomApplicationInputAppCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string

Name	Description	Schema
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

DisableCustomApplicationInputSiteInfoType

Name	Description	Schema
device_id <i>optional</i>	device information Example : "string"	string
site_id <i>optional</i>	site id Example : "string"	string

DisableCustomApplication_InputType

Name	Description	Schema
app_ctx <i>optional</i>	Example : "DisableCustomApplicationInputAppCtxType"	DisableCustomApplicati onInputAppCtxType
app_id <i>required</i>	application id Example : "string"	string
site_info <i>required</i>	Example : ["DisableCustomApplicationInputSiteInfoType"]	< DisableCustomApplicati onInputSiteInfoType > array

DisableCustomApplication_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id of the rpc. Caller will be using this to track the notification Example : "string"	string
status <i>optional</i>	status of rpc Example : "string"	enum (CLEAR, ERROR)

DisablePolicyInputPolicyCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string

Name	Description	Schema
tenant <i>optional</i>	Project or tenant name Example : "string"	string

DisablePolicyInputSiteInfoType

Name	Description	Schema
device_id <i>optional</i>	device information Example : "string"	string
site_id <i>optional</i>	site id Example : "string"	string

DisablePolicy_InputType

Name	Description	Schema
enable_hub_spoke_mode <i>optional</i>	If set to true, there will be policy pushed on Hub for every policy pushed on Spoke - to be used in future Example : true	boolean
policy_ctx <i>optional</i>	Example : "DisablePolicyInputPolicyCtxType"	DisablePolicyInputPolicyCtxType
policy_id <i>required</i>	id of policy to disable Example : "string"	string
site_info <i>optional</i>	Example : ["DisablePolicyInputSiteInfoType"]	< DisablePolicyInputSiteInfoType > array

DisablePolicy_OutputType

Name	Description	Schema
request_id <i>optional</i>	Request id of the rpc. Caller will be using this to track the notification Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
status <i>optional</i>	status Example : "string"	enum (CLEAR, ERROR)

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

EnableCustomAppGroupInputAppGroupCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

EnableCustomAppGroupInputSiteInfoType

Name	Description	Schema
device_id <i>optional</i>	device information Example : "string"	string
site_id <i>optional</i>	site id Example : "string"	string

EnableCustomAppGroup_InputType

Name	Description	Schema
app_group_ctx <i>optional</i>	Example : "EnableCustomAppGroupInputAppGroupCtxType"	EnableCustomAppGroupInputAppGroupCtxType
group_id <i>required</i>	App group id Example : "string"	string
site_info <i>required</i>	Example : ["EnableCustomAppGroupInputSiteInfoType"]	< EnableCustomAppGroupInputSiteInfoType > array

EnableCustomAppGroup_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id of the rpc. Caller will be using this to track the notification Example : "string"	string
status <i>optional</i>	status of rpc Example : "string"	enum (CLEAR, ERROR)

EnableCustomApplicationInputAppCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

EnableCustomApplicationInputSiteInfoType

Name	Description	Schema
device_id <i>optional</i>	device information Example : "string"	string
site_id <i>optional</i>	site id Example : "string"	string

EnableCustomApplication_InputType

Name	Description	Schema
app_ctx <i>optional</i>	Example : "EnableCustomApplicationInputAppCtxType"	EnableCustomApplicationInputAppCtxType
app_id <i>required</i>	application id Example : "string"	string
site_info <i>required</i>	Example : ["EnableCustomApplicationInputSiteInfoType"]	< EnableCustomApplicationInputSiteInfoType > array

EnableCustomApplication_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id of the rpc. Caller will be using this to track the notification Example : "string"	string
status <i>optional</i>	status of rpc Example : "string"	enum (CLEAR, ERROR)

EnablePolicyInputPolicyCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string

Name	Description	Schema
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : <code>"string"</code>	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : <code>"string"</code>	string
tenant <i>optional</i>	Project or tenant name Example : <code>"string"</code>	string

EnablePolicyInputSiteInfoType

Name	Description	Schema
device_id <i>optional</i>	device information Example : <code>"string"</code>	string
site_id <i>optional</i>	site id Example : <code>"string"</code>	string

EnablePolicy_InputType

Name	Description	Schema
enable_hub_spoke_mode <i>optional</i>	If set to true, there will be policy pushed on hub for every policy pushed on spoke - to be used in future Example : <code>true</code>	boolean
policy_ctx <i>optional</i>	Example : <code>"EnablePolicyInputPolicyCtxType"</code>	EnablePolicyInputPolicyCtxType
policy_id <i>required</i>	id of policy to enable Example : <code>"string"</code>	string
site_info <i>optional</i>	Example : <code>["EnablePolicyInputSiteInfoType"]</code>	< EnablePolicyInputSiteInfoType > array

EnablePolicy_OutputType

Name	Description	Schema
request_id <i>optional</i>	Request id of the rpc. Caller will be using this to track the notification Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
status <i>optional</i>	status Example : <code>"string"</code>	enum (CLEAR, ERROR)

GetAppGroupsOutputAppGroupType

Name	Description	Schema
app_id <i>optional</i>	List of all app-ids under current app group Example : <code>"string"</code>	string

Name	Description	Schema
group_description <i>optional</i>	Example : "string"	string
group_id <i>optional</i>	Example : "string"	string
group_type <i>optional</i>	custom/predefined Default : "CUSTOM" Example : "string"	string

GetAppGroups_InputType

Name	Description	Schema
group_id <i>optional</i>	Example : "string"	string

GetAppGroups_OutputType

Name	Description	Schema
app_group <i>optional</i>	Example : ["GetAppGroupsOutputAppGroupType"]	< GetAppGroupsOutputAppGroupType > array
status <i>optional</i>	status of rpc Example : "string"	enum (CLEAR, ERROR)

GetAppSlaMappingsOutputMappingsType

Name	Description	Schema
sites <i>optional</i>	Example : "MappingsSitesType"	MappingsSitesType

GetAppSlaMappings_InputType

Name	Description	Schema
detail <i>optional</i>	If set to true it will return additional details, sla break up etc Example : true	boolean
site_uuids <i>required</i>	uuids Sites Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
sla_ids <i>optional</i>	List of SLA profiles to be filtered Example : "string"	string
tenant <i>optional</i>	tenant information Example : "string"	string

GetAppSlaMappings_OutputType

Name	Description	Schema
mappings <i>optional</i>	Example : ["GetAppSlaMappingsOutputMappingsType"]	< GetAppSlaMappingsOu tputMappingsType > array

GetApplicationsOutputApplicationType

Name	Description	Schema
app_category <i>optional</i>	Example : "string"	string
app_descriptio n <i>optional</i>	Example : "string"	string
app_id <i>optional</i>	Example : "string"	string
app_type <i>optional</i>	custom/predefined Default : "CUSTOM" Example : "string"	string

GetApplications_InputType

Name	Description	Schema
app_id <i>optional</i>	Example : "string"	string

GetApplications_OutputType

Name	Description	Schema
application <i>optional</i>	Example : ["GetApplicationsOutputApplicationType"]	< GetApplicationsOutput ApplicationType > array
status <i>optional</i>	Example : "string"	enum (CLEAR, ERROR)

GetSlaByUuids_InputType

Name	Description	Schema
detail <i>optional</i>	If set to true it will recursively call the objects belonging to the given uuid, and resolve till the last level. Example : true	boolean
object_uuids <i>required</i>	uuids of the SLA objects Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetSlaHistoryOutputObjectsType

Name	Description	Schema
end_time <i>optional</i>	end time Example : 0	integer(int64)
sla_archive <i>optional</i>	Example : "ObjectsSlaArchiveType"	ObjectsSlaArchiveType
start_time <i>optional</i>	start time Example : 0	integer(int64)

GetSlaHistory_InputType

Name	Description	Schema
from_time <i>optional</i>	To return SLA history from this time Example : 0	integer(int64)
sla_id <i>required</i>	SLA Id Example : "string"	string
to_time <i>optional</i>	SLA history until this time Example : 0	integer(int64)

GetSlaHistory_OutputType

Name	Description	Schema
objects <i>optional</i>	Example : ["GetSlaHistoryOutputObjectsType"]	< GetSlaHistoryOutputObjectsType > array

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : "string"	string
description <i>optional</i>	Example : "string"	string
enable <i>optional</i>	Example : true	boolean
modifier <i>optional</i>	Example : "string"	string
permissions <i>optional</i>	Example : "PermType"	PermType
user-visible <i>optional</i>	Example : true	boolean
uuid <i>optional</i>	Example : "UuidType"	UuidType

InstallPredefinedApplicationIdInputAppCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string

Name	Description	Schema
domain <i>optional</i>	Domain name of the caller Example : <code>"string"</code>	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : <code>"string"</code>	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : <code>"string"</code>	string
tenant <i>optional</i>	Project or tenant name Example : <code>"string"</code>	string

InstallPredefinedApplicationIdInputSiteInfoType

Name	Description	Schema
device_id <i>optional</i>	device information Example : <code>"string"</code>	string
site_id <i>optional</i>	site id Example : <code>"string"</code>	string

InstallPredefinedApplicationId_InputType

Name	Description	Schema
app-ctx <i>optional</i>	Example : <code>"InstallPredefinedApplicationIdInputAppCtxType"</code>	InstallPredefinedApplicationIdInputAppCtxType
app_version <i>optional</i>	Version of the App ID to be installed on device Default : <code>"latest"</code> Example : <code>"string"</code>	string
site_info <i>required</i>	Example : [<code>"InstallPredefinedApplicationIdInputSiteInfoType"</code>]	< InstallPredefinedApplicationIdInputSiteInfoType > array

InstallPredefinedApplicationId_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id returned for this RPC Example : <code>"string"</code>	string

JobJobDataType

Name	Description	Schema
job-data <i>optional</i>	Job data Example : <code>"string"</code>	string

LinkMonitorInfoMetricsType

Name	Description	Schema
name <i>required</i>	Name of the SLA Metric Example : "string"	string
value <i>optional</i>	Current metric value Example : 0	integer(int64)

MappingsSitesType

Name	Description	Schema
devices <i>optional</i>	Example : "SitesDevicesType"	SitesDevicesType
site_uuid <i>optional</i>	site uuid Example : "string"	string

ObjectsSlaArchiveType

Name	Description	Schema
CoS <i>optional</i>	Class of Service setting Example : "string"	string
constraints <i>optional</i>	Example : "SlaArchiveConstraintsType"	SlaArchiveConstraintsType
description <i>optional</i>	User friendly description Example : "string"	string
download_rate_limiter <i>optional</i>	Example : "SlaArchiveDownloadRateLimiterType"	SlaArchiveDownloadRateLimiterType
link <i>optional</i>	Statically map a policy to a Link - valid ifl value to be passed Example : "string"	string
sla_id <i>optional</i>	Name for this SLA Example : "string"	string
update_number <i>optional</i>	Gets incremented by 1, each time PUT request is called on the object. During object creation its value is set to 0. Default : 0 Example : 0	integer(int32)
upload_rate_limiter <i>optional</i>	Example : "SlaArchiveUploadRateLimiterType"	SlaArchiveUploadRateLimiterType

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
group_access <i>optional</i>	Example : 0	integer(int32)
other_access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string

Name	Description	Schema
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner-access <i>optional</i>	Example : 0	integer(int32)
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

PolicyDefPolicyActionType

Name	Description	Schema
sla_profile <i>required</i>	SLA profile with information of throughput, jitter, loss, delay, latency, preferred WAN link, notification level, priority and precedence Example : "string"	string

PolicyDefPolicyMatchType

Name	Description	Schema
app_refs <i>optional</i>	Example : ["PolicyMatchAppRefsType"]	< PolicyMatchAppRefsType > array
appgroup_refs <i>optional</i>	Example : ["PolicyMatchAppgroupRefsType"]	< PolicyMatchAppgroupRefsType > array
department <i>required</i>	list of department id - lan information Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

PolicyMatchAppRefsType

Name	Description	Schema
href <i>optional</i>	HATEOAS HREF for the destination node Example : "string"	string
id <i>optional</i>	list of application on which policy can be applied Example : "string"	string
to <i>optional</i>	destination node FQ name Example : "string"	string

PolicyMatchAppgroupRefsType

Name	Description	Schema
href <i>optional</i>	HATEOAS HREF for the destination node Example : "string"	string
id <i>optional</i>	list of uuid of application groups on which policy will be applied Example : "string"	string
to <i>optional</i>	destination node FQ name Example : "string"	string

PolicyOperationalInfoDeviceInfoType

Name	Description	Schema
device_id <i>required</i>	device information Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
enable_hub_spoke_mode <i>optional</i>	policy mode if applied on hub and spoke both - to be used in future Example : true	boolean
job_id <i>optional</i>	job id Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
policy_status <i>optional</i>	status on device Example : "string"	enum (APPLY_IN_PROGRESS, APPLIED, DELETE_IN_PROGRESS)
site_id <i>optional</i>	site id Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string

Name	Description	Schema
role_name <i>optional</i>	Example : <code>"string"</code>	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : <code>["RbacRuleType"]</code>	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : <code>"string"</code>	string
rule_object <i>optional</i>	Example : <code>"string"</code>	string
rule_perms <i>optional</i>	Example : <code>"RbacPermType"</code>	RbacPermType

RulesOperationalInfoAppGroupListType

Name	Description	Schema
app_group_name <i>optional</i>	app group name Example : <code>"string"</code>	string
app_group_uuid <i>required</i>	app group uuid Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

RulesOperationalInfoAppListType

Name	Description	Schema
app_name <i>optional</i>	app name Example : <code>"string"</code>	string
app_uuid <i>required</i>	app uuid Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

RulesOperationalInfoRuleEnforcementStatusType

status on device

Type : enum (APPLY_IN_PROGRESS, APPLIED, DELETE_IN_PROGRESS)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : <code>"string"</code>	string
tenant_access <i>optional</i>	Example : <code>0</code>	integer(int32)

SignatureBasedSignatureProtocolType

Name	Description	Schema
signature <i>optional</i>	Example : <code>"SignatureProtocolSignatureType"</code>	SignatureProtocolSignatureType
signature_protocol <i>optional</i>	Protocol that carry given application Example : <code>"string"</code>	enum (HTTP, TCP, UDP, SSL)

SignatureMemberType

Name	Description	Schema
context <i>optional</i>	context to be matched Example : <code>"string"</code>	string
direction <i>optional</i>	direction for application flow Default : <code>"any"</code> Example : <code>"string"</code>	enum (any, client-to-server, server-to-client)
member_name <i>optional</i>	Application signature member identifier in range m01 - m15 Example : <code>"string"</code>	string
pattern <i>optional</i>	patterns are to match information in the received packet like : <code>.idpsystemtest.</code> Example : <code>"string"</code>	string

SignaturePortRangeType

Name	Description	Schema
end_port <i>optional</i>	end port Example : <code>0</code>	integer(int32)
port_id <i>optional</i>	port id, construct the id as protocol-start_port-end_port Example : <code>"string"</code>	string
protocol <i>optional</i>	Transport protocol Example : <code>"string"</code>	enum (tcp, udp)
start_port <i>optional</i>	start port Example : <code>0</code>	integer(int32)

SignatureProtocolSignatureType

Name	Description	Schema
member <i>optional</i>	Example : <code>"SignatureMemberType"</code>	SignatureMemberType
port_range <i>optional</i>	Example : <code>"SignaturePortRangeType"</code>	SignaturePortRangeType

Name	Description	Schema
signature_name <i>optional</i>	A unique application signature identifier Example : <code>"string"</code>	string

SitesDevicesType

Name	Description	Schema
device_uuid <i>optional</i>	Device UUID Example : <code>"string"</code>	string
slas <i>optional</i>	Example : <code>"DevicesSlasType"</code>	DevicesSlasType

SlaArchiveConstraintsType

Name	Description	Schema
delay <i>optional</i>	Example : <code>"[_csp-pslam_constraintsdelaytype]"</code>	ConstraintsDelayType
jitter <i>optional</i>	Example : <code>"[_csp-pslam_constraintsjittertype]"</code>	ConstraintsJitterType
latency <i>optional</i>	Example : <code>"[_csp-pslam_constraintslatencytype]"</code>	ConstraintsLatencyType
loss <i>optional</i>	Example : <code>"[_csp-pslam_constraintslosstype]"</code>	ConstraintsLossType
throughput <i>optional</i>	Example : <code>"[_csp-pslam_constraintsthroughputtype]"</code>	ConstraintsThroughputType

SlaArchiveDownloadRateLimiterType

Name	Description	Schema
bandwidth_limit <i>optional</i>	Bandwidth limit in kbps Example : <code>0</code>	integer(int64)
burst_size_limit <i>optional</i>	Burst size limit in bytes Example : <code>0</code>	integer(int64)

SlaArchiveUploadRateLimiterType

Name	Description	Schema
bandwidth_limit <i>optional</i>	Bandwidth limit in kbps Example : <code>0</code>	integer(int64)
burst_size_limit <i>optional</i>	Burst size limit in bytes Example : <code>0</code>	integer(int64)

SlaConstraintsType

Name	Description	Schema
delay <i>optional</i>	Example : "[_csp-pslam_constraintsdelaytype] "	ConstraintsDelayType
jitter <i>optional</i>	Example : "[_csp-pslam_constraintsjittertype] "	ConstraintsJitterType
latency <i>optional</i>	Example : "[_csp-pslam_constraintslatencytype] "	ConstraintsLatencyType
loss <i>optional</i>	Example : "[_csp-pslam_constraintslosstype] "	ConstraintsLossType
throughput <i>optional</i>	Example : "[_csp-pslam_constraintsthroughputtype] "	ConstraintsThroughputType

SlaDownloadRateLimiterType

Name	Description	Schema
bandwidth_limit <i>optional</i>	Bandwidth limit in kbps Example : 0	integer(int64)
burst_size_limit <i>optional</i>	Burst size limit in bytes Example : 0	integer(int64)

SlaMgmtInfoConstraintsType

Name	Description	Schema
name <i>required</i>	Name of the SLA constraint Example : "string"	string

SlaMgmtInfoViolationType

SLA violation status

Type : enum (CLEAR, ERROR)

SlaUploadRateLimiterType

Name	Description	Schema
bandwidth_limit <i>optional</i>	Bandwidth limit in kbps Example : 0	integer(int64)
burst_size_limit <i>optional</i>	Burst size limit in bytes Example : 0	integer(int64)

StartMonitorSlaInputMonitorCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string

Name	Description	Schema
domain <i>optional</i>	Domain name of the caller Example : "string"	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

StartMonitorSla_InputType

Name	Description	Schema
destination <i>required</i>	destination address Example : "string"	string
device <i>required</i>	Device uuid Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
link <i>required</i>	Interface id Example : "string"	string
monitor-ctx <i>optional</i>	Example : "StartMonitorSlaInputMonitorCtxType"	StartMonitorSlaInputMonitorCtxType
site <i>required</i>	Site uuid Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

StartMonitorSla_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id returned for this RPC Example : "string"	string
request-id <i>optional</i>	Request id returned for this RPC. Callers will use this to receive notification Example : "string"	string

StopMonitorSlaInputMonitorCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string

Name	Description	Schema
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

StopMonitorSla_InputType

Name	Description	Schema
destination <i>required</i>	destination address Example : "string"	string
device <i>required</i>	device uuid Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
link <i>required</i>	Interface id Example : "string"	string
monitor-ctx <i>optional</i>	Example : "StopMonitorSlaInputMonitorCtxType"	StopMonitorSlaInputMonitorCtxType
site <i>required</i>	Site uuid Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

StopMonitorSla_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id returned for this RPC Example : "string"	string
request-id <i>optional</i>	Request id returned for this RPC. Callers will use this to receive notification Example : "string"	string

UpdatePredefinedApplicationIdInputAppCtxType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
job_id <i>optional</i>	Job id sent by the caller. PSLAM will use it for the creation of the job or request-id Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing-key and queue name Example : "string"	string

Name	Description	Schema
tenant <i>optional</i>	Project or tenant name Example : <code>"string"</code>	string

UpdatePredefinedApplicationId_InputType

Name	Description	Schema
app-ctx <i>optional</i>	Example : <code>"UpdatePredefinedApplicationIdInputAppCtxType"</code>	UpdatePredefinedApplicationIdInputAppCtxType
app_version <i>optional</i>	Version of the App ID to be downloaded Default : <code>"latest"</code> Example : <code>"string"</code>	string

UpdatePredefinedApplicationId_OutputType

Name	Description	Schema
job-id <i>optional</i>	Job id returned for this RPC Example : <code>"string"</code>	string

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : <code>0</code>	integer(int64)
uuid_mslong <i>optional</i>	Example : <code>0</code>	integer(int64)

YangUuidType

uuid of the job instance

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : <code>"AclEntriesType"</code>	AclEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

app-group

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

app-group{id}

Name	Description	Schema
app-group <i>optional</i>	Example : ["[_csp-pslam_app-group_id_app-group]"]	< app-group{id}_app-group > array
application <i>optional</i>	Example : ["[_csp-pslam_app-group_id_application]"]	< app-group{id}_application > array
display-name <i>optional</i>	Example : "string"	string
group_description <i>optional</i>	group description Example : "string"	string

Name	Description	Schema
group_device_specific_name <i>optional</i>	Device specific group name Example : "string"	string
group_id <i>optional</i>	group id Example : "string"	string
group_type <i>optional</i>	custom/predefined Example : "AppGroupGroupTypeType"	AppGroupGroupTypeType
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

app_operational_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

app_operational_info{id}

Name	Description	Schema
app-group <i>optional</i>	Example : ["[_csp-pslam_app_operational_info_id_app-group]"]	< app_operational_info{id}_app-group > array
application <i>optional</i>	Example : ["[_csp-pslam_app_operational_info_id_application]"]	< app_operational_info{id}_application > array
category <i>optional</i>	Example : ["[_csp-pslam_app_operational_info_id_category]"]	< app_operational_info{id}_category > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
site_info <i>optional</i>	site info Example : "AppOperationalInfoSiteInfoType"	AppOperationalInfoSiteInfoType
status <i>optional</i>	Example : "AppOperationalInfoStatusType"	AppOperationalInfoStatusType

application

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`application{id}`

Name	Description	Schema
app_description <i>optional</i>	app description Example : <code>"string"</code>	string
app_device_specific_name <i>optional</i>	Device specific app name Example : <code>"string"</code>	string
app_id <i>optional</i>	id - name for application Example : <code>"string"</code>	string
app_type <i>optional</i>	custom/predefined Example : <code>"ApplicationAppTypeType"</code>	ApplicationAppTypeType
category <i>optional</i>	Example : <code>["_csp-pslam_application_id_category"]</code>	< application{id}_category > array
custom_application <i>optional</i>	application signature mapping Example : <code>"ApplicationCustomApplicationType"</code>	ApplicationCustomApplicationType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

`category`

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

`category{id}`

Name	Description	Schema
cat_description <i>optional</i>	category description Example : <code>"string"</code>	string
cat_id <i>optional</i>	category id Example : <code>"string"</code>	string
cat_type <i>optional</i>	custom/predefined Example : <code>"CategoryCatTypeType"</code>	CategoryCatTypeType

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
domain <i>optional</i>	Example : ["[_csp-pslam_config-root_id_domain]"]	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : ["[_csp-pslam_config-root_id_global-system-config]"]	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

deploy-policy-input

Name	Description	Schema
input <i>optional</i>	Example : "DeployPolicy_InputType"	DeployPolicy_InputType

deploy-policy-output

Name	Description	Schema
output <i>optional</i>	Example : "DeployPolicy_OutputType"	DeployPolicy_OutputType

disable_custom_app_group-input

Name	Description	Schema
input <i>optional</i>	Example : "DisableCustomAppGroup_InputType"	DisableCustomAppGroup_InputType

disable_custom_app_group-output

Name	Description	Schema
output <i>optional</i>	Example : "DisableCustomAppGroup_OutputType"	DisableCustomAppGroup_OutputType

disable_custom_application-input

Name	Description	Schema
input <i>optional</i>	Example : "DisableCustomApplication_InputType"	DisableCustomApplication_InputType

disable_custom_application-output

Name	Description	Schema
output <i>optional</i>	Example : "DisableCustomApplication_OutputType"	DisableCustomApplication_OutputType

disable_policy-input

Name	Description	Schema
input <i>optional</i>	Example : "DisablePolicy_InputType"	DisablePolicy_InputType

disable_policy-output

Name	Description	Schema
output <i>optional</i>	Example : "DisablePolicy_OutputType"	DisablePolicy_OutputType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-pslam_domain_id_api-access-list]"]	< domain{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
domain-limits <i>optional</i>	Example : "DomainLimitsType"	DomainLimitsType
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType

Name	Description	Schema
namespace <i>optional</i>	Example : ["[_csp-pslam_domain_id_namespace]"]	< domain{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
project <i>optional</i>	Example : ["[_csp-pslam_domain_id_project]"]	< domain{id}_project > array

enable_custom_app_group-input

Name	Description	Schema
input <i>optional</i>	Example : "EnableCustomAppGroup_InputType"	EnableCustomAppGroup_InputType

enable_custom_app_group-output

Name	Description	Schema
output <i>optional</i>	Example : "EnableCustomAppGroup_OutputType"	EnableCustomAppGroup_OutputType

enable_custom_application-input

Name	Description	Schema
input <i>optional</i>	Example : "EnableCustomApplication_InputType"	EnableCustomApplication_InputType

enable_custom_application-output

Name	Description	Schema
output <i>optional</i>	Example : "EnableCustomApplication_OutputType"	EnableCustomApplication_OutputType

enable_policy-input

Name	Description	Schema
input <i>optional</i>	Example : "EnablePolicy_InputType"	EnablePolicy_InputType

enable_policy-output

Name	Description	Schema
output <i>optional</i>	Example : "EnablePolicy_OutputType"	EnablePolicy_OutputType

get_app_groups-input

Name	Description	Schema
input <i>optional</i>	Example : "GetAppGroups_InputType"	GetAppGroups_InputType

get_app_groups-output

Name	Description	Schema
output <i>optional</i>	Example : "GetAppGroups_OutputType"	GetAppGroups_OutputType

get_app_sla_mappings-input

Name	Description	Schema
input <i>optional</i>	Example : "GetAppSlaMappings_InputType"	GetAppSlaMappings_InputType

get_app_sla_mappings-output

Name	Description	Schema
output <i>optional</i>	Example : "GetAppSlaMappings_OutputType"	GetAppSlaMappings_OutputType

get_applications-input

Name	Description	Schema
input <i>optional</i>	Example : "GetApplications_InputType"	GetApplications_InputType

get_applications-output

Name	Description	Schema
output <i>optional</i>	Example : "GetApplications_OutputType"	GetApplications_OutputType

get_sla_by_uuids-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSlaByUuids_InputType"	GetSlaByUuids_InputType

get_sla_by_uuids-output

Name	Description	Schema
output <i>optional</i>	Example : "[_csp-pslam_getslabyuuids_outputtype] "	GetSlaByUuids_OutputType

get_sla_history-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSlaHistory_InputType"	GetSlaHistory_InputType

get_sla_history-output

Name	Description	Schema
output <i>optional</i>	Example : "GetSlaHistory_OutputType"	GetSlaHistory_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

install_predefined_application_id-input

Name	Description	Schema
input <i>optional</i>	Example : "InstallPredefinedApplicationId_InputType"	InstallPredefinedApplicationId_InputType

install_predefined_application_id-output

Name	Description	Schema
output <i>optional</i>	Example : "InstallPredefinedApplicationId_OutputType"	InstallPredefinedApplicationId_OutputType

job

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

job{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
job-data <i>optional</i>	Job data Example : "JobJobDataType"	JobJobDataType
job-info <i>optional</i>	Job information parameter.Used for showing the output or exception message for the submitted job Example : "string"	string
job-instance-uuid <i>optional</i>	uuid of the job instance Example : "YangUuidType"	YangUuidType
job-type <i>optional</i>	RPC type of the submitted job. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
state <i>optional</i>	State of the job.Possible values could be submitted,running,success,failed Example : "string"	string

link_monitor_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

link_monitor_info{id}

Name	Description	Schema
bandwidth <i>optional</i>	Subscribed bandwidth of the underlay Example : "[_csp-pslam_xsd_unsignedlong]"	xsd:unsignedLong
device <i>optional</i>	Device id Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
info <i>optional</i>	additional information Example : "string"	string
link <i>optional</i>	link id Example : "YangUuidType"	YangUuidType
link_name <i>optional</i>	link name Example : "string"	string
metrics <i>optional</i>	SLA metrics for the given link Example : "LinkMonitorInfoMetricsType"	LinkMonitorInfoMetricsType

Name	Description	Schema
network <i>optional</i>	link id Example : "YangUidType"	YangUidType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
probe <i>optional</i>	probe name Example : "string"	string
site <i>optional</i>	Site id Example : "YangUidType"	YangUidType
state <i>optional</i>	RPM running/stopped Example : "string"	string

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

policy_def

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

policy_def{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
order <i>optional</i>	order - not required for vsrx devices as It has in built support Example : "[_csp-pslam_xsd_unsignedlong]"	xsd:unsignedLong
perms2 <i>optional</i>	Example : "PermType2"	PermType2

Name	Description	Schema
policy_action <i>optional</i>	action on policy Example : <code>"PolicyDefPolicyActionType"</code>	PolicyDefPolicyActionType
policy_id <i>optional</i>	policy id Example : <code>"string"</code>	string
policy_match <i>optional</i>	match condition Example : <code>"PolicyDefPolicyMatchType"</code>	PolicyDefPolicyMatchType

[policy_operational_info](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[policy_operational_info{id}](#)

Name	Description	Schema
device_info <i>optional</i>	locations given for policy configuration Example : <code>"PolicyOperationalInfoDeviceInfoType"</code>	PolicyOperationalInfoDeviceInfoType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
policy_id <i>optional</i>	id of policy Example : <code>"string"</code>	string

[project](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[project{id}](#)

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-pslam_project_id_api-access-list"]</code>	< project{id}_api-access-list > array
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType

Name	Description	Schema
link_monitor_info <i>optional</i>	Example : ["[_csp-pslam_project_id_link_monitor_info]"]	< project{id}_link_monitor_info > array
namespace <i>optional</i>	Example : ["[_csp-pslam_project_id_namespace]"]	< project{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
quota <i>optional</i>	Example : "QuotaType"	QuotaType
rules_operational_info <i>optional</i>	Example : ["[_csp-pslam_project_id_rules_operational_info]"]	< project{id}_rules_operational_info > array
sla <i>optional</i>	Example : ["[_csp-pslam_project_id_sla]"]	< project{id}_sla > array
sla_mgmt_info <i>optional</i>	Example : ["[_csp-pslam_project_id_sla_mgmt_info]"]	< project{id}_sla_mgmt_info > array
sla_to_vrf_mapping <i>optional</i>	Example : ["[_csp-pslam_project_id_sla_to_vrf_mapping]"]	< project{id}_sla_to_vrf_mapping > array

rules_operational_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

rules_operational_info{id}

Name	Description	Schema
app_group_list <i>optional</i>	list of application group in rule Example : "RulesOperationalInfoAppGroupListType"	RulesOperationalInfoAppGroupListType
app_list <i>optional</i>	list of application in rule Example : "RulesOperationalInfoAppListType"	RulesOperationalInfoAppListType
device_name <i>optional</i>	device information Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
policy_id <i>optional</i>	id of policy Example : "string"	string

Name	Description	Schema
policy_profile <i>optional</i>	policy profile Example : <code>"string"</code>	string
rule_enforcement_status <i>optional</i>	status on device Example : <code>"RulesOperationalInfoRuleEnforcementStatusType"</code>	RulesOperationalInfoRuleEnforcementStatusType
rule_id <i>optional</i>	id of rule Example : <code>"string"</code>	string
rule_name <i>optional</i>	rule name on device Example : <code>"string"</code>	string
rule_property_1 <i>optional</i>	apbr or cos Example : <code>"string"</code>	string
rule_property_2 <i>optional</i>	vpn name for apbr Example : <code>"string"</code>	string
rule_property_3 <i>optional</i>	routing instance name for apbr/ rate limiter name for cos Example : <code>"string"</code>	string
site_id <i>optional</i>	site id Example : <code>"YangUuidType"</code>	YangUuidType
sla_id <i>optional</i>	sla_id Example : <code>"string"</code>	string
spoke_device_list <i>optional</i>	list of names of spoke devices, used when rule is applied on hub, not required for now Example : <code>"string"</code>	string
topo_device_id <i>optional</i>	topo_device_id Example : <code>"YangUuidType"</code>	YangUuidType

[sla](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[sla_archive](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[sla_archive{id}](#)

Name	Description	Schema
CoS <i>optional</i>	Class of Service setting Example : "string"	string
constraints <i>optional</i>	List of SLA constraints that need to be monitored for violations Example : "SlaArchiveConstraintsType"	SlaArchiveConstraintsType
description <i>optional</i>	User friendly description Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
download_rate_limiter <i>optional</i>	download rate limiter - traffic coming back to interface Example : "SlaArchiveDownloadRateLimiterType"	SlaArchiveDownloadRateLimiterType
end_time <i>optional</i>	SLA used until Example : "[_csp-pslam_xsd_unsignedlong] "	xsd:unsignedLong
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
link <i>optional</i>	Statically map a policy to a Link - valid ifl value to be passed Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
priority <i>optional</i>	Rank of the given SLA profile Example : "[_csp-pslam_xsd_unsignedshort] "	xsd:unsignedShort
sla_id <i>optional</i>	Name for this SLA Example : "string"	string
start_time <i>optional</i>	SLA activated at Example : "[_csp-pslam_xsd_unsignedlong] "	xsd:unsignedLong
update_number <i>optional</i>	Gets incremented by 1, each time PUT request is called on the object. During object creation its value is set to 0. Example : 0	integer(int32)
upload_rate_limiter <i>optional</i>	upload rate limiter - traffic going out of interface Example : "SlaArchiveUploadRateLimiterType"	SlaArchiveUploadRateLimiterType

sla_mgmt_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

sla_mgmt_info{id}

Name	Description	Schema
constraints <i>optional</i>	SLA violaton status for various constraints Example : "SlaMgmtInfoConstraintsType"	SlaMgmtInfoConstraintsType
device <i>optional</i>	device id Example : "YangUuidType"	YangUuidType

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
end_time <i>optional</i>	End of last SLA outage Example : <code>"string"</code>	string
end_time_utc <i>optional</i>	End time measured in UTC Example : <code>"[_csp-pslam_xsd_unsignedlong]"</code>	xsd:unsignedLong
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
inactive <i>optional</i>	Prolonged inactivity of a SLA will mean a clean up Example : <code>"[_csp-pslam_xsd_unsignedshort]"</code>	xsd:unsignedShort
last_outage_duration <i>optional</i>	Last SLA outage measured in seconds Example : <code>"[_csp-pslam_xsd_unsignedlong]"</code>	xsd:unsignedLong
link <i>optional</i>	Current link for the SLA Example : <code>"YangUuidType"</code>	YangUuidType
link_monitor_info <i>optional</i>	Example : <code>["_csp-pslam_sla_mgmt_info_id_link_monitor_info"]</code>	< sla_mgmt_info{id}_link_monitor_info > array
link_switch_in_progress <i>optional</i>	To be set when PSLAM is waiting for Routing manager to update the link ranking Example : <code>"[_csp-pslam_xsd_boolean]"</code>	xsd:boolean
network <i>optional</i>	Network or VPN details Example : <code>"YangUuidType"</code>	YangUuidType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
site <i>optional</i>	site id Example : <code>"YangUuidType"</code>	YangUuidType
sla_id <i>optional</i>	SLA Profile Example : <code>"string"</code>	string
sla_to_vrf_mapping <i>optional</i>	Example : <code>["_csp-pslam_sla_mgmt_info_id_sla_to_vrf_mapping"]</code>	< sla_mgmt_info{id}_sla_to_vrf_mapping > array
start_time <i>optional</i>	Start of last SLA outage Example : <code>"string"</code>	string
start_time_utc <i>optional</i>	Start time measured in UTC Example : <code>"[_csp-pslam_xsd_unsignedlong]"</code>	xsd:unsignedLong
violation <i>optional</i>	SLA violation status Example : <code>"SlaMgmtInfoViolationType"</code>	SlaMgmtInfoViolationType

sla_to_vrf_mapping

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

sla_to_vrf_mapping{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
sla <i>optional</i>	Example : <code>["_csp-pslam_sla_to_vrf_mapping_id_sla"]</code>	< sla_to_vrf_mapping{id}_sla > array
sla_id <i>optional</i>	Name of the SLA profile Example : <code>"string"</code>	string
vrf_index <i>optional</i>	A VRF slot number Example : <code>"[_csp-pslam_xsd_unsignedbyte]"</code>	xsd:unsignedByte

sla{id}

Name	Description	Schema
CoS <i>optional</i>	Class of Service setting Example : <code>"string"</code>	string
constraints <i>optional</i>	List of SLA constraints that need to be monitored for violations Example : <code>"SlaConstraintsType"</code>	SlaConstraintsType
description <i>optional</i>	User friendly description Example : <code>"string"</code>	string
display-name <i>optional</i>	Example : <code>"string"</code>	string
download_rate_limiter <i>optional</i>	download rate limiter - traffic coming back to interface Example : <code>"SlaDownloadRateLimiterType"</code>	SlaDownloadRateLimiterType
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
link <i>optional</i>	Statically map a policy to a Link - valid ifl value to be passed Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
priority <i>optional</i>	Rank of the given SLA profile Example : <code>"[_csp-pslam_xsd_unsignedshort]"</code>	xsd:unsignedShort
sla_archive <i>optional</i>	Example : <code>["_csp-pslam_sla_id_sla_archive"]</code>	< sla{id}_sla_archive > array
sla_id <i>optional</i>	Name for this SLA Example : <code>"string"</code>	string

Name	Description	Schema
update_number <i>optional</i>	Gets incremented by 1, each time PUT request is called on the object. During object creation its value is set to 0. Example : 0	integer(int32)
upload_rate_limiter <i>optional</i>	upload rate limiter - traffic going out of interface Example : "SlaUploadRateLimiterType"	SlaUploadRateLimiterType

start_monitor_sla-input

Name	Description	Schema
input <i>optional</i>	Example : "StartMonitorSla_InputType"	StartMonitorSla_InputType

start_monitor_sla-output

Name	Description	Schema
output <i>optional</i>	Example : "StartMonitorSla_OutputType"	StartMonitorSla_OutputType

stop_monitor_sla-input

Name	Description	Schema
input <i>optional</i>	Example : "StopMonitorSla_InputType"	StopMonitorSla_InputType

stop_monitor_sla-output

Name	Description	Schema
output <i>optional</i>	Example : "StopMonitorSla_OutputType"	StopMonitorSla_OutputType

update_predefined_application_id-input

Name	Description	Schema
input <i>optional</i>	Example : "UpdatePredefinedApplicationId_InputType"	UpdatePredefinedApplicationId_InputType

update_predefined_application_id-output

Name	Description	Schema
output <i>optional</i>	Example : "UpdatePredefinedApplicationId_OutputType"	UpdatePredefinedApplicationId_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.12. Shared Object

9.12.1. Overview

Service to manage Application and Address objects.

Version information

Version : 3.0

URI scheme

BasePath : /shared-object

Schemes : HTTP

Tags

- bulk_delete : RPC to delete object. As CRUD can take only one uuid for delete, for bulk delete this RPC is required to take list of uuids as input.
- referrer_info : Details of the callers referring to this object.
- application : application signature node
- job : Entity used to track the status of the submitted,running,completed or failed job

- address : Address node

Produces

- `application/json`

9.12.2. Resources

Address

Address node

Add a new address

POST
 /shared-object/address

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>address{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>address{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/shared-object/address"`

Request body

```

{
  "addr_name" : "string",
  "address_type" : { },
  "ip_address" : "string",
  "description" : "string",
  "host_name" : "string",
  "update_disabled" : "<<_csp-shared-object_xsd_boolean>>",
  "address_version" : { },
  "definition_type" : { },
  "update_number" : 0,
  "ref_count" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "referrer_info" : [ null ],
  "address" : [ null ]
}

```

Example HTTP response

Response 200

```
{
  "addr_name" : "string",
  "address_type" : { },
  "ip_address" : "string",
  "description" : "string",
  "host_name" : "string",
  "update_disabled" : "<<_csp-shared-object_xsd_boolean>>",
  "address_version" : { },
  "definition_type" : { },
  "update_number" : 0,
  "ref_count" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "referrer_info" : [ null ],
  "address" : [ null ]
}
```

Get the address list

```
GET /shared-object/address
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< address > array

Example HTTP request

Request path

```
"/shared-object/address"
```

Example HTTP response

Response 200

```
"array"
```

Get a single address

```
GET /shared-object/address/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	address{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/address/0"
```

Example HTTP response

Response 200

```

{
  "addr_name" : "string",
  "address_type" : { },
  "ip_address" : "string",
  "description" : "string",
  "host_name" : "string",
  "update_disabled" : "<<_csp-shared-object_xsd_boolean>>",
  "address_version" : { },
  "definition_type" : { },
  "update_number" : 0,
  "ref_count" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "referrer_info" : [ null ],
  "address" : [ null ]
}

```

Update address information

PUT /shared-object/address/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	address{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/shared-object/address/0"

Example HTTP response

Response 200

```

{
  "addr_name" : "string",
  "address_type" : { },
  "ip_address" : "string",
  "description" : "string",
  "host_name" : "string",
  "update_disabled" : "<<_csp-shared-object_xsd_boolean>>",
  "address_version" : { },
  "definition_type" : { },
  "update_number" : 0,
  "ref_count" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "referrer_info" : [ null ],
  "address" : [ null ]
}

```

Delete a single address

```
DELETE /shared-object/address/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/address/0"
```

Application

application signature node

Add a new application

```
POST /shared-object/application
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		application{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	application{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/application"
```

Request body

```
{
  "signature_version" : 0,
  "app_id" : 0,
  "app_name" : "string",
  "app_device_specific_name" : "string",
  "description" : "string",
  "category" : "string",
  "sub_category" : "string",
  "risk" : "string",
  "characteristics" : "string",
  "over_list" : "string",
  "aliases" : "string",
  "definition_type" : { },
  "app_sig_type" : { },
  "update_number" : 0,
  "ref_count" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    }
  },
}
```

```

"uuid" : {
  "uuid_mslong" : 0,
  "uuid_lslong" : 0
},
"enable" : true,
"description" : "string",
"user-visible" : true,
"creator" : "string",
"modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"referrer_info" : [ null ],
"application" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "signature_version" : 0,
  "app_id" : 0,
  "app_name" : "string",
  "app_device_specific_name" : "string",
  "description" : "string",
  "category" : "string",
  "sub_category" : "string",
  "risk" : "string",
  "characteristics" : "string",
  "over_list" : "string",
  "aliases" : "string",
  "definition_type" : { },
  "app_sig_type" : { },
  "update_number" : 0,
  "ref_count" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",

```

```
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"referrer_info" : [ null ],
"application" : [ null ]
}
```

Get the application list

GET /shared-object/application

Responses

HTTP Code	Description	Schema
200	Successful operation	< application > array

Example HTTP request

Request path

"/shared-object/application"

Example HTTP response

Response 200

```
"array"
```

Get a single application

```
GET /shared-object/application/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	application{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/application/0"
```

Example HTTP response

Response 200

```
{
  "signature_version" : 0,
  "app_id" : 0,
  "app_name" : "string",
  "app_device_specific_name" : "string",
  "description" : "string",
}
```

```

"category" : "string",
"sub_category" : "string",
"risk" : "string",
"characteristics" : "string",
"over_list" : "string",
"aliases" : "string",
"definition_type" : { },
"app_sig_type" : { },
"update_number" : 0,
"ref_count" : 0,
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"referrer_info" : [ null ],
"application" : [ null ]
}

```

Update application information

```
PUT /shared-object/application/{id0}
```


Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	application{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/application/0"
```

Example HTTP response

Response 200

```
{
  "signature_version" : 0,
  "app_id" : 0,
  "app_name" : "string",
  "app_device_specific_name" : "string",
  "description" : "string",
  "category" : "string",
  "sub_category" : "string",
  "risk" : "string",
  "characteristics" : "string",
  "over_list" : "string",
  "aliases" : "string",
  "definition_type" : { },
  "app_sig_type" : { },
  "update_number" : 0,
  "ref_count" : 0,
```

```
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"referrer_info" : [ null ],
"application" : [ null ]
}
```

Delete a single application

```
DELETE /shared-object/application/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/application/0"
```

Bulk_delete

RPC to delete object. As CRUD can take only one uuid for delete, for bulk delete this RPC is required to take list of uuids as input.

Execute bulk_delete RPC

```
POST /shared-object/bulk_delete
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		bulk_delete-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	bulk_delete-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/bulk_delete"
```

Request body

```
{
  "input" : {
    "shared_object_info" : {
      "object_type" : "string",
      "object_uuids" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "status" : "string",
    "failure_list" : [ {
      "uuid" : "string",
      "message" : "string"
    } ]
  }
}
```

Job

Entity used to track the status of the submitted,running,completed or failed job

Add a new job

```
POST /shared-object/job
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>job{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>job{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/job"
```

Request body

```

{
  "state" : "string",
  "job_type" : "string",
  "job_info" : "string",
  "job_instance_uuid" : { },
  "job_data" : {
    "job_data" : "string",
    "create_ctxt" : {
      "ctxt_id" : "string",
      "auth_url" : "string",
      "domain" : "string",
      "tenant" : "string",
      "requester_url" : "string"
    }
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "state" : "string",
  "job_type" : "string",
  "job_info" : "string",
  "job_instance_uuid" : { },
  "job_data" : {
    "job_data" : "string",
    "create_ctxt" : {
      "ctxt_id" : "string",
      "auth_url" : "string",
      "domain" : "string",
      "tenant" : "string",
      "requester_url" : "string"
    }
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```


Get the job list

```
GET /shared-object/job
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< job > array

Example HTTP request

Request path

```
"/shared-object/job"
```

Example HTTP response

Response 200

```
"array"
```

Get a single job

```
GET /shared-object/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	job{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/job/0"
```

Example HTTP response

Response 200

```

{
  "state" : "string",
  "job_type" : "string",
  "job_info" : "string",
  "job_instance_uuid" : { },
  "job_data" : {
    "job_data" : "string",
    "create_ctxt" : {
      "ctxt_id" : "string",
      "auth_url" : "string",
      "domain" : "string",
      "tenant" : "string",
      "requester_url" : "string"
    }
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update job information

```
PUT /shared-object/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	job{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/job/0"
```

Example HTTP response

Response 200

```

{
  "state" : "string",
  "job_type" : "string",
  "job_info" : "string",
  "job_instance_uuid" : { },
  "job_data" : {
    "job_data" : "string",
    "create_ctxt" : {
      "ctxt_id" : "string",
      "auth_url" : "string",
      "domain" : "string",
      "tenant" : "string",
      "requester_url" : "string"
    }
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single job

```
DELETE /shared-object/job/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/job/0"
```

Referrer_info

Details of the callers referring to this object.

Add a new referrer_info

```
POST /shared-object/referrer_info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		referrer_info{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	referrer_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/referrer_info"
```

Request body

```

{
  "referrer_type" : "string",
  "referrer_object_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200


```
{
  "referrer_type" : "string",
  "referrer_object_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the referrer_info list

GET /shared-object/referrer_info

Responses

HTTP Code	Description	Schema
200	Successful operation	< referrer_info > array

Example HTTP request

Request path

```
"/shared-object/referrer_info"
```

Example HTTP response

Response 200

```
"array"
```

Get a single `referrer_info`

```
GET /shared-object/referrer_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	referrer_info{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/referrer_info/0"
```

Example HTTP response

Response 200

```
{
  "referrer_type" : "string",
  "referrer_object_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update referrer_info information

```
PUT /shared-object/referrer_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	referrer_info{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/referrer_info/0"
```

Example HTTP response

Response 200

```
{
  "referrer_type" : "string",
  "referrer_object_uuid" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single referrer_info

```
DELETE /shared-object/referrer_info/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/shared-object/referrer_info/0"
```

9.12.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

AcquireAndPublishInputCallerContextType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string

Name	Description	Schema
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing_key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

AcquireAndPublishInputSharedObjectInfoType

Name	Description	Schema
shared_object_info <i>optional</i>	Example : "SharedObjectInfoSharedObjectInfoType"	SharedObjectInfoSharedObjectInfoType

AcquireAndPublish_InputType

Name	Description	Schema
caller_context <i>optional</i>	Example : "AcquireAndPublishInputCallerContextType"	AcquireAndPublishInputCallerContextType
device_id <i>optional</i>	Device uuid, where config need to be pushed. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
referrer_object_uuid <i>required</i>	uuid of the Caller object refering to this object. eg, if Policy P1 refers to shared object application A1, then send uuid of P1. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
referrer_type <i>required</i>	Referrer type, example rule name, policy name etc. Shared object will not have any check for referrer type. It's a string so any value can be given. Example : "string"	string
shared_object_info <i>optional</i>	Example : "AcquireAndPublishInputSharedObjectInfoType"	AcquireAndPublishInputSharedObjectInfoType

AcquireAndPublish_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job id returned for this RPC Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
status <i>optional</i>	Status Example : "string"	enum (SUCCESS, FAILURE)

AddressAddressTypeType

Address type.

Type : enum (IPADDRESS, GROUP, RANGE, NETWORK, WILDCARD, DNS, POLYMORPHIC, ANY,

ANY_IPV4, ANY_IPV6, ALL_IPV6, DYNAMIC_ADDRESS_GROUP)

AddressAddressVersionType

Address version

Type : enum (IPV4, IPV6, MIXED)

AddressDefinitionTypeType

This field shows whether it's PREDEFINED or CUSTOM address. Only existing addresses (Any, ANY_IPV4, and ANY_IPV6) are marked as PREDEFINED, for user created applications it should be CUSTOM

Type : enum (PREDEFINED, CUSTOM)

ApplicationAppSigTypeType

Application signature type, it shows whether it's an application or group.

Type : enum (APPLICATION, GROUP)

ApplicationDefinitionTypeType

Definition of the Application. Only existing applications read from signature files are marked as PREDEFINED, for user created applications it should be CUSTOM

Type : enum (PREDEFINED, CUSTOM)

BulkDeleteInputSharedObjectInfoType

Name	Description	Schema
object_type <i>optional</i>	Type of the shared object. Example : "string"	enum (APPLICATION, ADDRESS)
object_uuids <i>optional</i>	uuids of the shared object. Example : "string"	string

BulkDeleteOutputFailureListType

Name	Description	Schema
message <i>optional</i>	Failure message Example : "string"	string
uuid <i>optional</i>	Failed object uuid Example : "string"	string

BulkDelete_InputType

Name	Description	Schema
shared_object_info <i>optional</i>	Example : "BulkDeleteInputSharedObjectInfoType"	BulkDeleteInputSharedObjectInfoType

BulkDelete_OutputType

Name	Description	Schema
failure_list <i>optional</i>	Example : ["BulkDeleteOutputFailureListType"]	< BulkDeleteOutputFailureListType > array
status <i>optional</i>	status Example : "string"	enum (SUCCESS, FAILURE)

DnsLookup_InputType

Name	Description	Schema
host_name <i>optional</i>	IP address for which DNS lookup need to be performed. Example : "string"	string
ip_address <i>optional</i>	IP address for which DNS lookup need to be performed. Example : "string"	string

DnsLookup_OutputType

Name	Description	Schema
host_name <i>optional</i>	IP address for which DNS lookup need to be performed. Example : "string"	string
ip_address <i>optional</i>	IP address for which DNS lookup need to be performed. Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

GetAddressByUuids_InputType

Name	Description	Schema
detail <i>optional</i>	If set to true it will recursively call the objects belonging to the given uuid, and resolve till the last level. Example: If application group G1 has members as A1(application), G2(app-group), then it returns complete object dump of A1 and objects referring to G2. Input [G1, A1] Output: G1, A1 _G2 _A1 If False, it will return object dump of only A1, and just G2, no detail of objects referring to G2. NOTE: All the three flags are mutually exclusive. i.e, either of these should be present in input Example : true	boolean

Name	Description	Schema
expand_first_level <i>optional</i>	If set to true it will recursively call the objects belonging to the given uuid, and resolve only the first level. Example: G3->G2->G1->A1. Input is [G3]. Output will be [G3->G2] NOTE: All the three flags are mutually exclusive. i.e, either of these should be present in input Example : true	boolean
flatten <i>optional</i>	Similar to detail flag, If set to true it will recursively call the objects belonging to the given uuid, and resolve till the last level. However, unlike detail flag, this will return flat list of object dump instead of hierarchical format, without any duplication. Example: G3->G2->G1->A1. Input is [G3, A1]. Output will be [G3, G2, G1, A1] NOTE: All the three flags are mutually exclusive. i.e, either of these should be present in input Example : true	boolean
object_uuids <i>required</i>	uuids of the shared object. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : " string "	string

GetApplicationByUuids_InputType

Name	Description	Schema
detail <i>optional</i>	If set to true it will recursively call the objects belonging to the given uuid, and resolve till the last level. Example: If application group G1 has members as A1(application), G2(app-group), then it returns complete object dump of A1 and objects referring to G2. Input [G1, A1] Output: G1, A1 _G2 _A1 If False, it will return object dump of only A1, and just G2, no detail of objects referring to G2. NOTE: All the three flags are mutually exclusive. i.e, either of these should be present in input Example : true	boolean
expand_first_level <i>optional</i>	If set to true it will recursively call the objects belonging to the given uuid, and resolve only the first level. Example: G3->G2->G1->A1. Input is [G3]. Output will be [G3->G2] NOTE: All the three flags are mutually exclusive. i.e, either of these should be present in input Example : true	boolean
flatten <i>optional</i>	Similar to detail flag, If set to true it will recursively call the objects belonging to the given uuid, and resolve till the last level. However, unlike detail flag, this will return flat list of object dump instead of hierarchical format, without any duplication. Example: G3->G2->G1->A1. Input is [G3, A1]. Output will be [G3, G2, G1, A1] NOTE: All the three flags are mutually exclusive. i.e, either of these should be present in input Example : true	boolean
object_uuids <i>required</i>	uuids of the shared object. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : " string "	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : <code>"string"</code>	string
description <i>optional</i>	Example : <code>"string"</code>	string
enable <i>optional</i>	Example : <code>true</code>	boolean
modifier <i>optional</i>	Example : <code>"string"</code>	string
permissions <i>optional</i>	Example : <code>"PermType"</code>	PermType
user-visible <i>optional</i>	Example : <code>true</code>	boolean
uuid <i>optional</i>	Example : <code>"UuidType"</code>	UuidType

[JobDataCreateCtxtType](#)

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : <code>"string"</code>	string
ctxt_id <i>optional</i>	Reference to the caller context uuid Example : <code>"string"</code>	string
domain <i>optional</i>	Domain name of the caller Example : <code>"string"</code>	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing_key and queue name Example : <code>"string"</code>	string
tenant <i>optional</i>	Project or tenant name Example : <code>"string"</code>	string

[JobJobDataType](#)

Name	Description	Schema
create_ctxt <i>optional</i>	Example : <code>"JobDataCreateCtxtType"</code>	JobDataCreateCtxtType
job_data <i>optional</i>	Job data Example : <code>"string"</code>	string

[PermType](#)

Name	Description	Schema
group <i>optional</i>	Example : <code>"string"</code>	string
group_access <i>optional</i>	Example : <code>0</code>	integer(int32)
other_access <i>optional</i>	Example : <code>0</code>	integer(int32)

Name	Description	Schema
owner <i>optional</i>	Example : "string"	string
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner-access <i>optional</i>	Example : 0	integer(int32)
share <i>optional</i>	Example : ["ShareType"]	< ShareType > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : <code>"string"</code>	string
rule_object <i>optional</i>	Example : <code>"string"</code>	string
rule_perms <i>optional</i>	Example : <code>"RbacPermType"</code>	RbacPermType

[RefInputReferrerInfoType](#)

Name	Description	Schema
referrer_object_uuid <i>optional</i>	uuid of the Caller object refering to this object. eg, if Policy P1 refers to shared object application A1, then send uuid of P1. Example : <code>"string"</code>	string
referrer_type <i>optional</i>	Referrer type, example rule name, policy name etc. Sahred object will not have any check for referrer type. It's a string so any value can be given. Example : <code>"string"</code>	string

[RefInputSharedObjectInfoType](#)

Name	Description	Schema
object_type <i>optional</i>	Type of the shared object. Example : <code>"string"</code>	enum (APPLICATION, ADDRESS)
object_uuids <i>optional</i>	uuids of the shared object. Example : <code>"string"</code>	string

[Ref_InputType](#)

Name	Description	Schema
referrer_info <i>optional</i>	Example : <code>"RefInputReferrerInfoType"</code>	RefInputReferrerInfoType
shared_object_info <i>optional</i>	Example : <code>"RefInputSharedObjectInfoType"</code>	RefInputSharedObjectInfoType

[Ref_OutputType](#)

Name	Description	Schema
message <i>optional</i>	Output message. Example : <code>"string"</code>	string
status <i>optional</i>	status Example : <code>"string"</code>	enum (SUCCESS, FAILURE)

[ReleaseAndPublishInputSharedObjectInfoType](#)

Name	Description	Schema
shared_object_info <i>optional</i>	Example : <code>"SharedObjectInfoSharedObjectInfoType"</code>	SharedObjectInfoSharedObjectInfoType

ReleaseAndPublish_InputType

Name	Description	Schema
device_id <i>optional</i>	Device uuid, where config need to be pushed. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
referrer_object_uuid <i>required</i>	uuid of the Caller object refering to this object. eg, if Policy P1 refers to shared object application A1, then send uuid of P1. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
referrer_type <i>required</i>	Referrer type, example rule name, policy name etc. Shared object will not have any check for referrer type. It's a string so any value can be given. Example : "string"	string
shared_object_info <i>optional</i>	Example : "ReleaseAndPublishInputSharedObjectInfoType"	ReleaseAndPublishInputSharedObjectInfoType

ReleaseAndPublish_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job id returned for this RPC Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
status <i>optional</i>	Status Example : "string"	enum (SUCCESS, FAILURE)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string
tenant_access <i>optional</i>	Example : 0	integer(int32)

SharedObjectInfoSharedObjectInfoType

Name	Description	Schema
object_type <i>optional</i>	Type of the shared object. Example : "string"	enum (APPLICATION, ADDRESS)
object_uuids <i>optional</i>	uuids of the shared object. Example : "string"	string

UnrefInputReferrerInfoType

Name	Description	Schema
referrer_object_uuid <i>optional</i>	uuid of the Caller object referring to this object. eg, if Policy P1 refers to shared object application A1, then send uuid of P1. Example : "string"	string
referrer_type <i>optional</i>	Referrer type, example rule name, policy name etc. Shared object will not have any check for referrer type. It's a string so any value can be given. Example : "string"	string

UnrefInputSharedObjectInfoType

Name	Description	Schema
object_type <i>optional</i>	Type of the shared object. Example : "string"	enum (APPLICATION, ADDRESS)
object_uuids <i>optional</i>	uuids of the shared object. Example : "string"	string

Unref_InputType

Name	Description	Schema
referrer_info <i>optional</i>	Example : "UnrefInputReferrerInfoType"	UnrefInputReferrerInfoType
shared_object_info <i>optional</i>	Example : "UnrefInputSharedObjectInfoType"	UnrefInputSharedObjectInfoType

Unref_OutputType

Name	Description	Schema
message <i>optional</i>	Output message. Example : "string"	string
status <i>optional</i>	status Example : "string"	enum (SUCCESS, FAILURE)

UpdatePredefinedObjectsInputCallerContextType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing_key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

UpdatePredefinedObjects_InputType

Name	Description	Schema
caller_context <i>optional</i>	Example : "UpdatePredefinedObjectsInputCallerContextType"	UpdatePredefinedObjectsInputCallerContextType
download_url <i>required</i>	Location to get the signature files. These files will be used to create predefined objects. Example : "string"	string
job_id <i>optional</i>	Caller may provide the job_id as part of input, so that same job_id will be used by this RPC. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
object_type <i>required</i>	Field to choose which object needs to be updated. Example : "string"	enum (APPLICATION, ADDRESS)
signature_version <i>required</i>	Application Signature version. Example : 0	integer(int32)

UpdatePredefinedObjects_OutputType

Name	Description	Schema
job_id <i>optional</i>	job_id output Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
status <i>optional</i>	Status of the RPC. Example : "string"	enum (SUCCESS, FAILURE)

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : 0	integer(int64)
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

YangUuidType

uuid of the job instance

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : " AclEntriesType "	AclEntriesType
display-name <i>optional</i>	Example : " string "	string
id-perms <i>optional</i>	Example : " IdPermsType "	IdPermsType
perms2 <i>optional</i>	Example : " PermType2 "	PermType2

acquire_and_publish-input

Name	Description	Schema
input <i>optional</i>	Example : " AcquireAndPublish_InputType "	AcquireAndPublish_InputType

acquire_and_publish-output

Name	Description	Schema
output <i>optional</i>	Example : " AcquireAndPublish_OutputType "	AcquireAndPublish_OutputType

address

Name	Description	Schema
fq_name <i>optional</i>	Example : " string "	string
uuid <i>optional</i>	Example : " string "	string

address{id}

Name	Description	Schema
addr_name <i>optional</i>	Address name. Example : " string "	string
address <i>optional</i>	Example : [" [_csp-shared-object_address_id_address] "]	< address{id}_address > array
address_type <i>optional</i>	Address type. Example : " AddressAddressTypeType "	AddressAddressTypeType
address_version <i>optional</i>	Address version Example : " AddressAddressVersionType "	AddressAddressVersionType
definition_type <i>optional</i>	This field shows whether it's PREDEFINED or CUSTOM address. Only existing addresses (Any, ANY_IPV4, and ANY_IPV6) are marked as PREDEFINED, for user created applications it should be CUSTOM Example : " AddressDefinitionTypeType "	AddressDefinitionTypeType

Name	Description	Schema
description <i>optional</i>	Description of the device object Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
host_name <i>optional</i>	Host_name Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
ip_address <i>optional</i>	IP address. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
ref_count <i>optional</i>	Example : 0	integer(int32)
referrer_info <i>optional</i>	Example : ["[_csp-shared-object_address_id_referrer_info]"]	< address{id}_referrer_info > array
update_disabled <i>optional</i>	If set to True, object will not be allowed to change. Default is False Example : "[_csp-shared-object_xsd_boolean]"	xsd:boolean
update_number <i>optional</i>	Gets incremented by 1, each time PUT request is called on the object. During object creation its value is set to 0. Example : 0	integer(int32)

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

application

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

application{id}

Name	Description	Schema
aliases <i>optional</i>	List of aliases. Example : <code>"string"</code>	string
app_device_specific_name <i>optional</i>	app_name is user visible name, which can be different than what device understands. This field will be used to store the name in device specific format. This is required only in case of PREDEFINED applications Example : <code>"string"</code>	string
app_id <i>optional</i>	Application ID, set in case type is application. Value correspond to AppID in signature file. This is mainly required for PREDEFINED applications. Example : <code>0</code>	integer(int32)
app_name <i>optional</i>	Name of the application signature. Example : <code>"string"</code>	string
app_sig_type <i>optional</i>	Application signature type, it shows whether it's an application or group. Example : <code>"ApplicationAppSigTypeType"</code>	ApplicationAppSigTypeType
application <i>optional</i>	Example : <code>["_csp-shared-object_application_id_application"]</code>	<code>< application{id}_application > array</code>
category <i>optional</i>	Application signature category it belongs to. Example : <code>"string"</code>	string
characteristics <i>optional</i>	List of Application characteristics Example : <code>"string"</code>	string
definition_type <i>optional</i>	Definition of the Application. Only existing applications read from signature files are marked as PREDEFINED, for user created applications it should be CUSTOM Example : <code>"ApplicationDefinitionTypeType"</code>	ApplicationDefinitionTypeType
description <i>optional</i>	Application signature description Example : <code>"string"</code>	string
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
over_list <i>optional</i>	List of over tag (protocol) Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
ref_count <i>optional</i>	Reference count to the object. Example : <code>0</code>	integer(int32)

Name	Description	Schema
referrer_info <i>optional</i>	Example : ["[_csp-shared-object_application_id_referrer_info]"]	< application{id}_referrer_info > array
risk <i>optional</i>	Application signature risk value. Example : "string"	string
signature_version <i>optional</i>	Application Signature version. Value correspond to signature_version in signature file. This is mainly required for PREDEFINED applications. Example : 0	integer(int32)
sub_category <i>optional</i>	Application signature subcategory. Example : "string"	string
update_number <i>optional</i>	Gets incremented by 1, each time PUT request is called on the object. During object creation its value is set to 0. Example : 0	integer(int32)

bulk_delete-input

Name	Description	Schema
input <i>optional</i>	Example : "BulkDelete_InputType"	BulkDelete_InputType

bulk_delete-output

Name	Description	Schema
output <i>optional</i>	Example : "BulkDelete_OutputType"	BulkDelete_OutputType

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
domain <i>optional</i>	Example : ["[_csp-shared-object_config-root_id_domain]"]	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : ["[_csp-shared-object_config-root_id_global-system-config]"]	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType

Name	Description	Schema
perms2 <i>optional</i>	Example : "PermType2"	PermType2

dns_lookup-input

Name	Description	Schema
input <i>optional</i>	Example : "DnsLookup_InputType"	DnsLookup_InputType

dns_lookup-output

Name	Description	Schema
output <i>optional</i>	Example : "DnsLookup_OutputType"	DnsLookup_OutputType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-shared-object_domain_id_api-access-list]"]	< domain{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
domain-limits <i>optional</i>	Example : "DomainLimitsType"	DomainLimitsType
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[_csp-shared-object_domain_id_namespace]"]	< domain{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
project <i>optional</i>	Example : ["[_csp-shared-object_domain_id_project]"]	< domain{id}_project > array

get_address_by_uuids-input

Name	Description	Schema
input <i>optional</i>	Example : "GetAddressByUuids_InputType"	GetAddressByUuids_InputType

get_address_by_uuids-output

Name	Description	Schema
output <i>optional</i>	Example : "[_csp-shared-object_getaddressbyuuids_outputtype]"	GetAddressByUuids_OutputType

get_application_by_uuids-input

Name	Description	Schema
input <i>optional</i>	Example : "GetApplicationByUuids_InputType"	GetApplicationByUuids_InputType

get_application_by_uuids-output

Name	Description	Schema
output <i>optional</i>	Example : "[_csp-shared-object_getapplicationbyuuids_outputtype]"	GetApplicationByUuids_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

job

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

job{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
job_data <i>optional</i>	Job data Example : <code>"JobJobDataType"</code>	JobJobDataType
job_info <i>optional</i>	Job information parameter.Used for showing the output or exception message for the submitted job Example : <code>"string"</code>	string
job_instance_uuid <i>optional</i>	uuid of the job instance Example : <code>"YangUuidType"</code>	YangUuidType
job_type <i>optional</i>	RPC type of the submitted job. Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
state <i>optional</i>	State of the job.Possible values could be submitted,running,succes,failed Example : <code>"string"</code>	string

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

project

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

project{id}

Name	Description	Schema
address <i>optional</i>	Example : ["[csp-shared-object_project_id_address]"]	< project{id}_address > array
api-access-list <i>optional</i>	Example : ["[csp-shared-object_project_id_api-access-list]"]	< project{id}_api-access-list > array
application <i>optional</i>	Example : ["[csp-shared-object_project_id_application]"]	< project{id}_application > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[csp-shared-object_project_id_namespace]"]	< project{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
quota <i>optional</i>	Example : "QuotaType"	QuotaType

ref-input

Name	Description	Schema
input <i>optional</i>	Example : "Ref_InputType"	Ref_InputType

ref-output

Name	Description	Schema
output <i>optional</i>	Example : "Ref_OutputType"	Ref_OutputType

referrer_info

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

referrer_info{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType

Name	Description	Schema
perms2 <i>optional</i>	Example : "PermType2"	PermType2
referrer_object_uuid <i>optional</i>	uuid of the Caller object refering to this object. eg, if Policy P1 refers to shared object application A1, then send uuid of P1. Example : "YangUuidType"	YangUuidType
referrer_type <i>optional</i>	Referrer type, example rule name, policy name etc. Sahred object will not have any check for referrer type. It's a string so any value can be given. Example : "string"	string

release_and_publish-input

Name	Description	Schema
input <i>optional</i>	Example : "ReleaseAndPublish_InputType"	ReleaseAndPublish_InputType

release_and_publish-output

Name	Description	Schema
output <i>optional</i>	Example : "ReleaseAndPublish_OutputType"	ReleaseAndPublish_OutputType

unref-input

Name	Description	Schema
input <i>optional</i>	Example : "Unref_InputType"	Unref_InputType

unref-output

Name	Description	Schema
output <i>optional</i>	Example : "Unref_OutputType"	Unref_OutputType

update_predefined_objects-input

Name	Description	Schema
input <i>optional</i>	Example : "UpdatePredefinedObjects_InputType"	UpdatePredefinedObjects_InputType

update_predefined_objects-output

Name	Description	Schema
output <i>optional</i>	Example : "UpdatePredefinedObjects_OutputType"	UpdatePredefinedObjects_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.13. Signature Manager

9.13.1. Overview

Service to manage Application signatures.

Version information

Version : 3.0

URI scheme

BasePath : /signature-manager

Schemes : HTTP

Tags

- `install_signature` : RPC to install signature on device.
- `download_history` : Object to store signature download history.
- `save_download_config` : Signature download settings.
- `latest_sigdb_update_list` : This RPC provides the list of available signatures by parsing updates.xml

- `download_signature` : RPC to download signatures.
- `active_db` : This stores active signature present in database.

Produces

- `application/json`

9.13.2. Resources

Active_db

This stores active signature present in database.

Add a new active_db

```
POST /signature-manager/active_db
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>active_db{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>active_db{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/active_db"
```

Request body

```

{
  "update_job_id" : "string",
  "detectors" : "<<_csp-signature-manager_xsd_any>>",
  "version" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "install_device_count" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "supported_platforms" : "string",
  "update_status" : "string",
  "state" : "string",
  "publish_date" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "update_job_id" : "string",
  "detectors" : "<<_csp-signature-manager_xsd_any>>",
  "version" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "install_device_count" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "supported_platforms" : "string",
  "update_status" : "string",
  "state" : "string",
  "publish_date" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the active_db list

```
GET /signature-manager/active_db
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< active_db > array

Example HTTP request

Request path

```
"/signature-manager/active_db"
```

Example HTTP response

Response 200

```
"array"
```

Get a single active_db

```
GET /signature-manager/active_db/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	active_db{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/active_db/0"
```

Example HTTP response

Response 200


```

{
  "update_job_id" : "string",
  "detectors" : "<<_csp-signature-manager_xsd_any>>",
  "version" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "install_device_count" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "supported_platforms" : "string",
  "update_status" : "string",
  "state" : "string",
  "publish_date" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update active_db information

```
PUT /signature-manager/active_db/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	active_db{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/active_db/0"
```

Example HTTP response

Response 200

```

{
  "update_job_id" : "string",
  "detectors" : "<<_csp-signature-manager_xsd_any>>",
  "version" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "install_device_count" : "<<_csp-signature-manager_xsd_unsignedshort>>",
  "supported_platforms" : "string",
  "update_status" : "string",
  "state" : "string",
  "publish_date" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single active_db

```
DELETE /signature-manager/active_db/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/active_db/0"
```

Download_history

Object to store signature download history.

Add a new download_history

```
POST /signature-manager/download_history
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>download_history{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>download_history{id}</code>
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/download_history"
```

Request body

```

{
  "result" : "string",
  "task_name" : "string",
  "time_stamp_string" : "string",
  "description" : "string",
  "user_name" : "string",
  "user_ip_addr" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "result" : "string",
  "task_name" : "string",
  "time_stamp_string" : "string",
  "description" : "string",
  "user_name" : "string",
  "user_ip_addr" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the download_history list

```
GET /signature-manager/download_history
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< download_history > array

Example HTTP request

Request path

```
"/signature-manager/download_history"
```

Example HTTP response

Response 200

```
"array"
```

Get a single `download_history`

```
GET /signature-manager/download_history/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	download_history{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/download_history/0"
```

Example HTTP response

Response 200

```
{
  "result" : "string",
  "task_name" : "string",
  "time_stamp_string" : "string",
  "description" : "string",
  "user_name" : "string",
  "user_ip_addr" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update download_history information

```
PUT /signature-manager/download_history/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	download_history{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/download_history/0"
```

Example HTTP response

Response 200

```

{
  "result" : "string",
  "task_name" : "string",
  "time_stamp_string" : "string",
  "description" : "string",
  "user_name" : "string",
  "user_ip_addr" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single download_history

```
DELETE /signature-manager/download_history/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/download_history/0"
```

Download_signature

RPC to download signatures.

Execute download_signature RPC

```
POST /signature-manager/download_signature
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		download_signature-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	download_signature-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/download_signature"
```

Request body

```
{
  "input" : {
    "signature_version" : 0,
    "delta_download" : true,
    "caller_context" : {
      "auth_url" : "string",
      "domain" : "string",
      "tenant" : "string",
      "requester_url" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string",
    "message" : "string"
  }
}
```

Install_signature

RPC to install signature on device.

Execute `install_signature` RPC

```
POST /signature-manager/install_signature
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		install_signature-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	install_signature-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/install_signature"
```

Request body

```
{
  "input" : {
    "signature_version" : 0,
    "device_uuids" : "string",
    "caller_context" : {
      "auth_url" : "string",
      "domain" : "string",
      "tenant" : "string",
      "requester_url" : "string"
    }
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string",
    "message" : "string"
  }
}
```

Latest_sigdb_update_list

This RPC provides the list of available signatures by parsing updates.xml

Execute latest_sigdb_update_list RPC

```
POST /signature-manager/latest_sigdb_update_list
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		latest_sigdb_update_list-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	latest_sigdb_update_list-output
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/latest_sigdb_update_list"
```

Request body

```
{
  "input" : {
    "signature_version" : 0
  }
}
```

Example HTTP response

Response 200


```
{
  "output" : {
    "signature_list" : [ {
      "title" : "string",
      "update_summary" : {
        "change_type" : "string",
        "change_action" : "string",
        "change_name" : "string"
      },
      "description" : "string",
      "detectors_list" : {
        "platform" : "string",
        "filename" : "string",
        "os_version" : "string",
        "detector_version" : "string"
      },
      "publish_date" : "string"
    } ]
  }
}
```

Save_download_config

Signature download settings.

Add a new save_download_config

POST /signature-manager/save_download_config

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		save_download_config{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	save_download_config{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/save_download_config"
```

Request body

```

{
  "download_url" : "string",
  "delta_download" : "<<_csp-signature-manager_xsd_boolean>>",
  "proxy" : {
    "enable" : true,
    "host_name" : "string",
    "host_port" : "string",
    "user_name" : "string",
    "password" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "download_url" : "string",
  "delta_download" : "<<_csp-signature-manager_xsd_boolean>>",
  "proxy" : {
    "enable" : true,
    "host_name" : "string",
    "host_port" : "string",
    "user_name" : "string",
    "password" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the `save_download_config` list

```
GET /signature-manager/save_download_config
```

Responses

HTTP Code	Description	Schema
200	Successful operation	save_download_config > array

Example HTTP request

Request path

```
"/signature-manager/save_download_config"
```

Example HTTP response

Response 200

```
"array"
```

Get a single save_download_config

```
GET /signature-manager/save_download_config/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	save_download_config{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/save_download_config/0"
```

Example HTTP response

Response 200

```

{
  "download_url" : "string",
  "delta_download" : "<<_csp-signature-manager_xsd_boolean>>",
  "proxy" : {
    "enable" : true,
    "host_name" : "string",
    "host_port" : "string",
    "user_name" : "string",
    "password" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update `save_download_config` information

```
PUT /signature-manager/save_download_config/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	save_download_config{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/save_download_config/0"
```

Example HTTP response

Response 200


```

{
  "download_url" : "string",
  "delta_download" : "<<_csp-signature-manager_xsd_boolean>>",
  "proxy" : {
    "enable" : true,
    "host_name" : "string",
    "host_port" : "string",
    "user_name" : "string",
    "password" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Delete a single `save_download_config`

```
DELETE /signature-manager/save_download_config/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/signature-manager/save_download_config/0"
```

9.13.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

DownloadSignatureInputCallerContextType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing_key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

DownloadSignature_InputType

Name	Description	Schema
caller_context <i>optional</i>	Example : "DownloadSignatureInputCallerContextType"	DownloadSignatureInputCallerContextType
delta_download <i>optional</i>	Flag to set for delta download. Example : true	boolean
signature_version <i>optional</i>	Signature version need to be downloaded. If not present, latest signature will be downloaded. Example : 0	integer(int32)

DownloadSignature_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job id returned for this RPC Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
message <i>optional</i>	Output message. Example : "string"	string

GetDeviceListOutputDevicesType

Name	Description	Schema
app_license <i>optional</i>	Application license details Example : <code>"string"</code>	string
device_family <i>optional</i>	Device Family Example : <code>"string"</code>	string
device_ip <i>optional</i>	Device IP Example : <code>"string"</code>	string
device_name <i>optional</i>	Device Name Example : <code>"string"</code>	string
device_uuid <i>optional</i>	EMS device UUID. Example : <code>"string"</code>	string
ips_license <i>optional</i>	IPS license details Example : <code>"string"</code>	string
platform <i>optional</i>	Platform/Hardware Model Example : <code>"string"</code>	string
software_release <i>optional</i>	Softwar Release/OS version Example : <code>"string"</code>	string
status <i>optional</i>	Status of the device Example : <code>"string"</code>	string

GetDeviceList_OutputType

Name	Description	Schema
devices <i>optional</i>	Example : <code>["GetDeviceListOutputDevicesType"]</code>	< GetDeviceListOutputDe vicesType > array

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : <code>"string"</code>	string
description <i>optional</i>	Example : <code>"string"</code>	string
enable <i>optional</i>	Example : <code>true</code>	boolean
modifier <i>optional</i>	Example : <code>"string"</code>	string
permissions <i>optional</i>	Example : <code>"PermType"</code>	PermType
user-visible <i>optional</i>	Example : <code>true</code>	boolean
uuid <i>optional</i>	Example : <code>"UuidType"</code>	UuidType

InstallSignatureInputCallerContextType

Name	Description	Schema
auth_url <i>optional</i>	authentication url Example : "string"	string
domain <i>optional</i>	Domain name of the caller Example : "string"	string
requester_url <i>optional</i>	The URL to be used for reporting the result of rpc execution. The url should provide enough info such as exchange name, routing_key and queue name Example : "string"	string
tenant <i>optional</i>	Project or tenant name Example : "string"	string

InstallSignature_InputType

Name	Description	Schema
caller_context <i>optional</i>	Example : "InstallSignatureInputCallerContextType"	InstallSignatureInputCallerContextType
device_uuids <i>required</i>	Device information where signatures need to be installed. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
signature_version <i>optional</i>	Signature version to be installed, this should be same as active_db version. If not present, active_db signature version will be installed. Example : 0	integer(int32)

InstallSignature_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job id returned for this RPC Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
message <i>optional</i>	Output message. Example : "string"	string

LatestSigddbUpdateListOutputSignatureListType

Name	Description	Schema
description <i>optional</i>	Description of the changes in format : <No. of newly added sig>,<No. of updated>, <No. of renamed>,<No. of deleted>. Example : "string"	string
detectors_list <i>optional</i>	Example : "SignatureListDetectorsListType"	SignatureListDetectorsListType
publish_date <i>optional</i>	Publish date of the signature. Example : "string"	string
title <i>optional</i>	Title/display name of the signature package. Example : "string"	string
update_summary <i>optional</i>	Example : "SignatureListUpdateSummaryType"	SignatureListUpdateSummaryType

LatestSigdbUpdateList_InputType

Name	Description	Schema
signature_version <i>optional</i>	Signature version. Example : 0	integer(int32)

LatestSigdbUpdateList_OutputType

Name	Description	Schema
signature_list <i>optional</i>	Example : ["LatestSigdbUpdateListOutputSignatureListType"]	< LatestSigdbUpdateListOutputSignatureListType > array

OfflineUploadSignature_InputType

Name	Description	Schema
file_name <i>optional</i>	File to be uploaded. Example : "string"	string

OfflineUploadSignature_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job id returned for this RPC Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
message <i>optional</i>	Output message. Example : "string"	string

PermType

Name	Description	Schema
group <i>optional</i>	Example : "string"	string
group_access <i>optional</i>	Example : 0	integer(int32)
other_access <i>optional</i>	Example : 0	integer(int32)
owner <i>optional</i>	Example : "string"	string
owner_access <i>optional</i>	Example : 0	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
owner <i>optional</i>	Example : <code>"string"</code>	string
owner-access <i>optional</i>	Example : <code>0</code>	integer(int32)
share <i>optional</i>	Example : <code>["ShareType"]</code>	< <code>ShareType</code> > array

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : <code>0</code>	integer(int32)
bgp-router <i>optional</i>	Example : <code>0</code>	integer(int32)
defaults <i>optional</i>	Example : <code>0</code>	integer(int32)
floating-ip <i>optional</i>	Example : <code>0</code>	integer(int32)
floating-ip-pool <i>optional</i>	Example : <code>0</code>	integer(int32)
global-vrouter-config <i>optional</i>	Example : <code>0</code>	integer(int32)
instance-ip <i>optional</i>	Example : <code>0</code>	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : <code>0</code>	integer(int32)
loadbalancer-member <i>optional</i>	Example : <code>0</code>	integer(int32)
loadbalancer-pool <i>optional</i>	Example : <code>0</code>	integer(int32)
logical-router <i>optional</i>	Example : <code>0</code>	integer(int32)
network-ipam <i>optional</i>	Example : <code>0</code>	integer(int32)
security-group <i>optional</i>	Example : <code>0</code>	integer(int32)
security-group-rule <i>optional</i>	Example : <code>0</code>	integer(int32)
service-instance <i>optional</i>	Example : <code>0</code>	integer(int32)

Name	Description	Schema
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string
rule_object <i>optional</i>	Example : "string"	string
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

SaveDownloadConfigProxyType

Name	Description	Schema
enable <i>optional</i>	If set, proxy configuration will be used. Example : <code>true</code>	boolean
host_name <i>optional</i>	Host name Example : <code>"string"</code>	string
host_port <i>optional</i>	Host port Example : <code>"string"</code>	string
password <i>optional</i>	Password Example : <code>"string"</code>	string
user_name <i>optional</i>	User name Example : <code>"string"</code>	string

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : <code>"string"</code>	string
tenant_access <i>optional</i>	Example : <code>0</code>	integer(int32)

SignatureListDetectorsListType

Name	Description	Schema
detector_version <i>optional</i>	Detector version Example : <code>"string"</code>	string
filename <i>optional</i>	filename Example : <code>"string"</code>	string
os_version <i>optional</i>	os_version Example : <code>"string"</code>	string
platform <i>optional</i>	Platform Example : <code>"string"</code>	string

SignatureListUpdateSummaryType

Name	Description	Schema
change_action <i>optional</i>	Change action. Example : <code>"string"</code>	string
change_name <i>optional</i>	Change name. Example : <code>"string"</code>	string
change_type <i>optional</i>	Change type. Example : <code>"string"</code>	string

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : <code>0</code>	integer(int64)

Name	Description	Schema
uuid_mslong <i>optional</i>	Example : 0	integer(int64)

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

active_db

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

active_db{id}

Name	Description	Schema
detectors <i>optional</i>	Detectors list. Example : "[_csp-signature-manager_xsd_any]"	xsd:any
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
install_device_count <i>optional</i>	Number of devices, this database is installed. Example : "[_csp-signature-manager_xsd_unsignedshort]"	xsd:unsignedShort
perms2 <i>optional</i>	Example : "PermType2"	PermType2
publish_date <i>optional</i>	publish date. Example : "string"	string

Name	Description	Schema
state <i>optional</i>	state. Example : <code>"string"</code>	string
supported_platforms <i>optional</i>	List of supported platforms. Example : <code>"string"</code>	string
update_job_id <i>optional</i>	Job ID which updated the signature database. Example : <code>"string"</code>	string
update_status <i>optional</i>	update status. Example : <code>"string"</code>	string
version <i>optional</i>	Version of the signature package downloaded. Example : <code>"[_csp-signature-manager_xsd_unsignedshort]"</code>	xsd:unsignedShort

[api-access-list](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[api-access-list{id}](#)

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : <code>"RbacRuleEntriesType"</code>	RbacRuleEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

[config-root](#)

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

[config-root{id}](#)

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
domain <i>optional</i>	Example : ["[_csp-signature-manager_config-root_id_domain]"]	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : ["[_csp-signature-manager_config-root_id_global-system-config]"]	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-signature-manager_domain_id_api-access-list]"]	< domain{id}_api-access-list > array
display-name <i>optional</i>	Example : "string"	string
domain-limits <i>optional</i>	Example : "DomainLimitsType"	DomainLimitsType
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[_csp-signature-manager_domain_id_namespace]"]	< domain{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
project <i>optional</i>	Example : ["[_csp-signature-manager_domain_id_project]"]	< domain{id}_project > array

download_history

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

download_history{id}

Name	Description	Schema
description <i>optional</i>	Description Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
result <i>optional</i>	Result of the operation, Success/Failure Example : "string"	string
task_name <i>optional</i>	Task name Example : "string"	string
time_stamp_string <i>optional</i>	time stamp Example : "string"	string
user_ip_addr <i>optional</i>	Example : "string"	string
user_name <i>optional</i>	user_name Example : "string"	string

download_signature-input

Name	Description	Schema
input <i>optional</i>	Example : "DownloadSignature_InputType"	DownloadSignature_InputType

download_signature-output

Name	Description	Schema
output <i>optional</i>	Example : "DownloadSignature_OutputType"	DownloadSignature_OutputType

get_device_list-input

Name	Description	Schema
input <i>optional</i>	Example : "[_csp-signature-manager_getdevicelist_inputtype]"	GetDeviceList_InputType

get_device_list-output

Name	Description	Schema
output <i>optional</i>	Example : "GetDeviceList_OutputType"	GetDeviceList_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

install_signature-input

Name	Description	Schema
input <i>optional</i>	Example : "InstallSignature_InputType"	InstallSignature_InputType

install_signature-output

Name	Description	Schema
output <i>optional</i>	Example : "InstallSignature_OutputType"	InstallSignature_OutputType

latest_sigdb_update_list-input

Name	Description	Schema
input <i>optional</i>	Example : "LatestSigdbUpdateList_InputType"	LatestSigdbUpdateList_InputType

latest_sigdb_update_list-output

Name	Description	Schema
output <i>optional</i>	Example : "LatestSigdbUpdateList_OutputType"	LatestSigdbUpdateList_OutputType

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

offline_upload_signature-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"OfflineUploadSignature_InputType"</code>	OfflineUploadSignature _InputType

offline_upload_signature-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"OfflineUploadSignature_OutputType"</code>	OfflineUploadSignature _OutputType

project

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

project{id}

Name	Description	Schema
active_db <i>optional</i>	Example : <code>["[csp-signature-manager_project_id_active_db]"]</code>	< project{id}_active_db > array
api-access-list <i>optional</i>	Example : <code>["[csp-signature-manager_project_id_api-access-list]"]</code>	< project{id}_api- access-list > array
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
namespace <i>optional</i>	Example : <code>["[csp-signature-manager_project_id_namespace]"]</code>	< project{id}_namespace > array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
quota <i>optional</i>	Example : <code>"QuotaType"</code>	QuotaType

save_download_config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

save_download_config{id}

Name	Description	Schema
delta_download <i>optional</i>	If True, updates delta diff only. Example : <code>"[_csp-signature-manager_xsd_boolean]"</code>	xsd:boolean
display-name <i>optional</i>	Example : <code>"string"</code>	string
download_url <i>optional</i>	URL to download signatures. Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
proxy <i>optional</i>	Stores proxy server details. Example : <code>"SaveDownloadConfigProxyType"</code>	SaveDownloadConfigProxyType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
es-schema <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
json-schema <i>optional</i>	Example : <code>"string"</code>	string
module-name <i>optional</i>	Example : <code>"string"</code>	string
namespace <i>optional</i>	Example : <code>"string"</code>	string

Name	Description	Schema
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.14. Topology Service

9.14.1. Overview

Use these API endpoints for modeling topologies and working with networked elements like devices, hubs, spokes, policy enforcement points, and other objects.

Version information

Version : 3.0

URI scheme

BasePath : /topology-service

Schemes : HTTP

Tags

- device-detach : Detach device.
- site : Tenant site.
- pop : POPs in the topology.
- region-dc : Regional data centers in the topology.
- get_department_by_uuids : This RPC can be used to get a snapshot of department objects that are identified in the input UUID list.
- device-discover : Discover device.
- lan-segment : List of LAN segments.
- network : Collection of termination points with connectivity.
- department : An abstraction to model security zones and LAN segments for an enterprise.
- service-chain : Collection of service chains.
- get-department-info : Gets department information based on department-id, device-id and device-db-id filters.
- get-zone-info : Get zone info for tenant's devices based on topo-role, site-group, site and device-type filters.
- get_site_by_uuids : Use this RPC to get a snapshot of site objects that are identified in the input UUID list.
- site-group : A group of sites.
- link : Connectivity between termination points.
- device : Network device or VNF.

- `get_site_group_by_uuids` : This RPC can be used to get a snapshot of site group objects that are identified in the input uuid list.
- `vim` : VIMs in the topology.
- `termination-point` : Termination point of a network device or VNF.
- `get-devices` : Get all devices for a tenant based on topo-role, device-ids and device-db-id filters.
- `central-dc` : Central data centers in the topology.
- `remove-vim` : Remove VIM from POP.
- `ems` : EMS to manage VNF.
- `remove-pop` : Remove POP and associated VIM assuming that devices detached using device-detach API.

Produces

- `application/json`

9.14.2. Resources

Central-dc

Central data centers in the topology.

Add a new central-dc

```
POST /topology-service/central-dc
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>central-dc{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>central-dc{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/central-dc"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
```

```

    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string",
"region-dc" : [ null ],
"pop" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,

```

```
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "region-dc" : [ null ],
  "pop" : [ null ]
}
```

Get the central-dc list

GET /topology-service/central-dc

Responses

HTTP Code	Description	Schema
200	Successful operation	< central-dc > array

Example HTTP request

Request path

"/topology-service/central-dc"

Example HTTP response

Response 200

"array"

Get a single central-dc

GET /topology-service/central-dc/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	central-dc{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/central-dc/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
}
```

```
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"region-dc" : [ null ],
"pop" : [ null ]
}
```

Update central-dc information

PUT /topology-service/central-dc/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	central-dc{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/central-dc/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,

```



```
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"region-dc" : [ null ],
"pop" : [ null ]
}
```

Delete a single central-dc

```
DELETE /topology-service/central-dc/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/central-dc/0"
```

Department

An abstraction to model security zones and LAN segments for an enterprise.

Add a new department

```
POST /topology-service/department
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>department{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>department{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/department"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "update_number" : 0,
  "vpn" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
```

```

    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "lan-segment" : [ null ],
  "network" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "update_number" : 0,
  "vpn" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",

```

```
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "lan-segment" : [ null ],
  "network" : [ null ]
}
```

Get the department list

```
GET /topology-service/department
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< department > array

Example HTTP request

Request path

```
"/topology-service/department"
```

Example HTTP response

Response 200

```
"array"
```

Get a single department

```
GET /topology-service/department/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	department{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/department/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
}
```

```
"update_number" : 0,
"vpn" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"lan-segment" : [ null ],
"network" : [ null ]
}
```

Update department information

PUT /topology-service/department/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	department{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/department/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "update_number" : 0,
  "vpn" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
```



```
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"lan-segment" : [ null ],
"network" : [ null ]
}
```

Delete a single department

DELETE /topology-service/department/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/department/0"
```

Device

Network device or VNF.

Add a new device

```
POST /topology-service/device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>device{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>device{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/device"
```

Request body

```
{
  "properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "authentication_options" : {
    "auth-key" : "string",
    "credential" : {
      "username" : "string",
      "password" : "string"
    }
  },
  "device_type" : { },
  "owner" : { },
  "vendor" : "string",
  "mgmt_ip" : "string",
  "device_family" : "string",
  "management-state" : "string",
  "device-template-id" : { },
  "as-number" : "string",
  "ipam-pool-id" : { },
  "software_release" : "string",
  "status" : "string",
  "platform" : "string",
  "app_license" : "string",
  "signature_version" : 0,
```

```

"signature_install_status" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"device" : [ null ],
"termination-point" : [ null ],
"lan-segment" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",

```

```

"address" : {
  "street" : "string",
  "street2" : "string",
  "city" : "string",
  "state" : "string",
  "zip_code" : "string",
  "country" : "string"
},
"authentication_options" : {
  "auth-key" : "string",
  "credential" : {
    "username" : "string",
    "password" : "string"
  }
},
"device_type" : { },
"owner" : { },
"vendor" : "string",
"mgmt_ip" : "string",
"device_family" : "string",
"management-state" : "string",
"device-template-id" : { },
"as-number" : "string",
"ipam-pool-id" : { },
"software_release" : "string",
"status" : "string",
"platform" : "string",
"app_license" : "string",
"signature_version" : 0,
"signature_install_status" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
}

```

```
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"device" : [ null ],
"termination-point" : [ null ],
"lan-segment" : [ null ]
}
```

Get the device list

```
GET /topology-service/device
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< device > array

Example HTTP request

Request path

```
"/topology-service/device"
```

Example HTTP response

Response 200

```
"array"
```

Get a single device

```
GET /topology-service/device/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	device{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/device/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
}
```

```

"authentication_options" : {
  "auth-key" : "string",
  "credential" : {
    "username" : "string",
    "password" : "string"
  }
},
"device_type" : { },
"owner" : { },
"vendor" : "string",
"mgmt_ip" : "string",
"device_family" : "string",
"management-state" : "string",
"device-template-id" : { },
"as-number" : "string",
"ipam-pool-id" : { },
"software_release" : "string",
"status" : "string",
"platform" : "string",
"app_license" : "string",
"signature_version" : 0,
"signature_install_status" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  }
]
}

```



```
    } ]
  },
  "display-name" : "string",
  "device" : [ null ],
  "termination-point" : [ null ],
  "lan-segment" : [ null ]
}
```

Update device information

PUT /topology-service/device/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	device{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

/topology-service/device/0

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : {
```

```

    "name" : "string"
  }
},
"db_id" : { },
"latitude" : "string",
"longitude" : "string",
"address" : {
  "street" : "string",
  "street2" : "string",
  "city" : "string",
  "state" : "string",
  "zip_code" : "string",
  "country" : "string"
},
"authentication_options" : {
  "auth-key" : "string",
  "credential" : {
    "username" : "string",
    "password" : "string"
  }
},
"device_type" : { },
"owner" : { },
"vendor" : "string",
"mgmt_ip" : "string",
"device_family" : "string",
"management-state" : "string",
"device-template-id" : { },
"as-number" : "string",
"ipam-pool-id" : { },
"software_release" : "string",
"status" : "string",
"platform" : "string",
"app_license" : "string",
"signature_version" : 0,
"signature_install_status" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  }
},
"uuid" : {
  "uuid_mslong" : 0,
  "uuid_lslong" : 0
}

```

```
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "device" : [ null ],
  "termination-point" : [ null ],
  "lan-segment" : [ null ]
}
```

Delete a single device

DELETE /topology-service/device/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/device/0"
```

Device-detach

Detach device.

Execute device-detach RPC

```
POST /topology-service/device-detach
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		device-detach-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	device-detach-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/device-detach"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "device" : [ {
      "device_uuid" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "job_id" : "string",
    "status" : "string",
    "reason" : "string",
    "device_ids" : [ {
      "device_id" : "string",
      "response" : "string",
      "reason" : "string"
    } ]
  }
}
```

Device-discover

Discover device.

Execute device-discover RPC

```
POST /topology-service/device-discover
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		device-discover-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	device-discover-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/device-discover"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "device" : [ {
      "pop_id" : "string",
      "name" : "string",
      "family" : "string",
      "device_ip" : "string",
      "device_type" : "string",
      "authentication" : {
        "password_based" : {
          "username" : "string",
          "password" : "string"
        },
        "key_based" : {
          "user_id" : "string"
        }
      }
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "job_id" : "string",
    "status" : "string"
  }
}
```

Ems

EMS to manage VNF.

Add a new ems

```
POST /topology-service/ems
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		ems{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	ems{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/ems"
```

Request body


```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Get the ems list

```
GET /topology-service/ems
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< ems > array

Example HTTP request

Request path

```
"/topology-service/ems"
```

Example HTTP response

Response 200

```
"array"
```

Get a single ems

```
GET /topology-service/ems/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	ems{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/ems/0"
```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Update ems information

```
PUT /topology-service/ems/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	ems{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/ems/0"
```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```


[Delete a single ems](#)

```
DELETE /topology-service/ems/{id0}
```

[Parameters](#)

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

[Responses](#)

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

[Example HTTP request](#)[Request path](#)

```
"/topology-service/ems/0"
```

[Get-department-info](#)

Gets department information based on department-id, device-id and device-db-id filters.

[Execute get-department-info RPC](#)

```
POST /topology-service/get-department-info
```

[Parameters](#)

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-department-info-input	

[Responses](#)

HTTP Code	Description	Schema
200	Successful operation	get-department-info-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/get-department-info"
```

Request body

```
{
  "input" : {
    "department-id" : "string",
    "device-id" : "string",
    "device-db-id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "termination_points" : [ {
      "interface_name" : "string",
      "interface_type" : "string",
      "interface_alias" : "string",
      "traffic_type" : "string",
      "ip_prefix" : "string",
      "vpn" : "string",
      "vpn_fq_name" : "string",
      "gateway_ip" : "string"
    } ],
    "lan-segments" : [ {
      "uuid" : "string",
      "fq_name" : "string",
      "lan_ports" : "string",
      "interface_names" : "string",
      "ip_subnet" : "string",
      "ip_subnet_uuid" : "string"
    } ],
    "zone" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Get-devices

Get all devices for a tenant based on topo-role, device-ids and device-db-id filters.

Execute `get-devices` RPC

```
POST /topology-service/get-devices
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-devices-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-devices-output
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/get-devices"
```

Request body

```
{
  "input" : {
    "tenant-id" : "string",
    "tenant-name" : "string",
    "topo-role" : "string",
    "device-ids" : "string",
    "device-db-ids" : "string"
  }
}
```

Example HTTP response

Response 200

```

{
  "output" : {
    "devices" : [ {
      "device_id" : "string",
      "device_db_id" : "string",
      "site_id" : "string",
      "device_family" : "string",
      "topo_role" : "string",
      "device_template_id" : "string",
      "as_number" : "string",
      "ipam_pool_id" : "string",
      "hubs" : {
        "device_id" : "string",
        "device_db_id" : "string"
      },
      "termination_points" : {
        "interface_name" : "string",
        "interface_type" : "string",
        "interface_alias" : "string",
        "traffic_type" : "string",
        "ip_prefix" : "string",
        "vpn" : "string",
        "vpn_fq_name" : "string",
        "department" : "string",
        "department_fq_name" : "string",
        "gateway_ip" : "string",
        "component" : "string",
        "subscribed_bandwidth" : 0,
        "provider" : "string",
        "cost" : 0,
        "cost_currency" : "string",
        "properties" : {
          "property" : {
            "name" : "string"
          }
        }
      }
    } ],
    "status" : "string",
    "reason" : "string"
  }
}

```

Get-zone-info

Get zone info for tenant's devices based on topo-role, site-group, site and device-type filters.

Execute get-zone-info RPC

```
POST /topology-service/get-zone-info
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get-zone-info-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get-zone-info-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/get-zone-info"
```

Request body

```
{
  "input" : {
    "topo-role" : "string",
    "site-group-names" : "string",
    "site-names" : "string",
    "device-types" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "devices" : [ {
      "device_id" : "string",
      "site_group_name" : "string",
      "site_name" : "string",
      "topo_role" : "string",
      "device_type" : "string",
      "zones" : {
        "zone" : "string",
        "is_breakout" : true,
        "is_vpn" : true
      }
    } ],
    "status" : "string",
    "reason" : "string"
  }
}
```

Get_department_by_uuids

This RPC can be used to get a snapshot of department objects that are identified in the input UUID list.

Execute `get_department_by_uuids` RPC

```
POST /topology-service/get_department_by_uuids
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_department_by_uuids-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_department_by_uuids-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/get_department_by_uuids"
```

Request body

```
{
  "input" : {
    "object_uuids" : "string",
    "detail" : true
  }
}
```

Example HTTP response

Response 200


```

{
  "output" : {
    "value" : [ {
      "uuid" : "string",
      "id_perms" : {
        "last_modified" : "string"
      },
      "fq_name" : "string",
      "site_refs" : {
        "to" : "string",
        "uuid" : "string",
        "topo_role" : "string",
        "state" : "string"
      },
      "device_refs" : {
        "to" : "string",
        "uuid" : "string",
        "device_db_id" : "string",
        "topo_role" : "string",
        "device_family" : "string"
      },
      "lan_segment_refs" : {
        "to" : "string",
        "uuid" : "string",
        "lan_ports" : "string",
        "ip_subnet" : "string",
        "ip_subnet_uuid" : "string"
      },
      "zones" : "string"
    } ]
  }
}

```

[Get_site_by_uuids](#)

Use this RPC to get a snapshot of site objects that are identified in the input UUID list.

Execute [get_site_by_uuids](#) RPC

```

POST /topology-service/get_site_by_uuids

```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_site_by_uuids-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_site_by_uuids-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/get_site_by_uuids"
```

Request body

```
{
  "input" : {
    "object_uuids" : "string",
    "state" : "string",
    "detail" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "value" : [ {
      "uuid" : "string",
      "id_perms" : {
        "last_modified" : "string"
      },
      "fq_name" : "string",
      "address" : {
        "street" : "string",
        "street2" : "string",
        "city" : "string",
        "state" : "string",
        "zip_code" : "string",
        "country" : "string"
      },
      "topo_role" : "string",
      "state" : "string",
      "device_refs" : {
        "to" : "string",
        "uuid" : "string",
        "device_db_id" : "string",
        "topo_role" : "string",
        "device_family" : "string"
      },
      "department_refs" : {
        "to" : "string",
        "uuid" : "string"
      }
    } ]
  }
}
```

Get_site_group_by_uuids

This RPC can be used to get a snapshot of site group objects that are identified in the input uuid list.

Execute `get_site_group_by_uuids` RPC

POST /topology-service/get_site_group_by_uuids

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		get_site_group_by_uuids-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	get_site_group_by_uuids-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/get_site_group_by_uuids"
```

Request body

```
{
  "input" : {
    "object_uuids" : "string",
    "detail" : true
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "value" : [ {
      "uuid" : "string",
      "id_perms" : {
        "last_modified" : "string"
      },
      "fq_name" : "string",
      "site_refs" : {
        "to" : "string",
        "uuid" : "string",
        "topo_role" : "string",
        "state" : "string"
      }
    } ]
  }
}
```

Lan-segment

List of LAN segments.

[Add a new lan-segment](#)

POST /topology-service/lan-segment

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		lan-segment{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	lan-segment{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/lan-segment"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "lan_ports" : { },
  "interface_names" : "string",
  "ip_subnet" : { },
  "ip_subnet_uuid" : { },
  "vlan" : "<<_csp-topology-service_xsd_unsignedshort>>",
  "dhcp" : "<<_csp-topology-service_xsd_boolean>>",
  "additional_config" : "<<_csp-topology-service_xsd_any>>",
  "configured" : "<<_csp-topology-service_xsd_boolean>>",
  "state" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    }
  },
}
```

```

"uuid" : {
  "uuid_mslong" : 0,
  "uuid_lslong" : 0
},
"enable" : true,
"description" : "string",
"user-visible" : true,
"creator" : "string",
"modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "lan_ports" : { },
  "interface_names" : "string",
  "ip_subnet" : { },
  "ip_subnet_uuid" : { },

```

```
"vlan" : "<<_csp-topology-service_xsd_unsignedshort>>",
"dhcp" : "<<_csp-topology-service_xsd_boolean>>",
"additional_config" : "<<_csp-topology-service_xsd_any>>",
"configured" : "<<_csp-topology-service_xsd_boolean>>",
"state" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Get the lan-segment list

```
GET /topology-service/lan-segment
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< lan-segment > array

Example HTTP request

Request path

```
"/topology-service/lan-segment"
```

Example HTTP response

Response 200

```
"array"
```

Get a single lan-segment

```
GET /topology-service/lan-segment/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	lan-segment{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/lan-segment/0"
```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "lan_ports" : { },
  "interface_names" : "string",
  "ip_subnet" : { },
  "ip_subnet_uuid" : { },
  "vlan" : "<<_csp-topology-service_xsd_unsignedshort>>",
  "dhcp" : "<<_csp-topology-service_xsd_boolean>>",
  "additional_config" : "<<_csp-topology-service_xsd_any>>",
  "configured" : "<<_csp-topology-service_xsd_boolean>>",
  "state" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {

```

```
"owner" : "string",
"owner-access" : 0,
"global-access" : 0,
"share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
} ]
},
"display-name" : "string"
}
```

Update lan-segment information

PUT /topology-service/lan-segment/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	lan-segment{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/topology-service/lan-segment/0"

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "lan_ports" : { },
  "interface_names" : "string",
  "ip_subnet" : { },
  "ip_subnet_uuid" : { },
  "vlan" : "<<_csp-topology-service_xsd_unsignedshort>>",
  "dhcp" : "<<_csp-topology-service_xsd_boolean>>",
  "additional_config" : "<<_csp-topology-service_xsd_any>>",
  "configured" : "<<_csp-topology-service_xsd_boolean>>",
  "state" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {

```

```
"owner" : "string",
"owner-access" : 0,
"global-access" : 0,
"share" : [ {
  "tenant" : "string",
  "tenant_access" : 0
} ],
},
"display-name" : "string"
}
```

Delete a single lan-segment

```
DELETE /topology-service/lan-segment/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/lan-segment/0"
```

Link

Connectivity between termination points.

Add a new link

```
POST /topology-service/link
```

Parameters

Type	Name	Description	Schema	Default
Body	input optional		link{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	link{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/link"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
```

```

    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "link_type" : { },
  "state" : { },
  "direction" : { },
  "access_link" : "<<_csp-topology-service_xsd_boolean>>",
  "monitored_state" : {
    "state" : "string",
    "details" : "string"
  },
  "linkname" : "string",
  "subscribed_bandwidth" : 0,
  "provider" : "string",
  "cost" : 0,
  "cost_currency" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "termination-point" : [ null ],

```

```

"network" : [ null ],
"link" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "link_type" : { },
  "state" : { },
  "direction" : { },
  "access_link" : "<<_csp-topology-service_xsd_boolean>>",
  "monitored_state" : {
    "state" : "string",
    "details" : "string"
  },
  "linkname" : "string",
  "subscribed_bandwidth" : 0,
  "provider" : "string",
  "cost" : 0,
  "cost_currency" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {

```



```
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"termination-point" : [ null ],
"network" : [ null ],
"link" : [ null ]
}
```

Get the link list

GET /topology-service/link

Responses

HTTP Code	Description	Schema
200	Successful operation	< link > array

Example HTTP request

Request path

"/topology-service/link"

Example HTTP response

Response 200

"array"

Get a single link

```
GET /topology-service/link/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	link{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/link/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
  }
}
```

```

    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "link_type" : { },
  "state" : { },
  "direction" : { },
  "access_link" : "<<_csp-topology-service_xsd_boolean>>",
  "monitored_state" : {
    "state" : "string",
    "details" : "string"
  },
  "linkname" : "string",
  "subscribed_bandwidth" : 0,
  "provider" : "string",
  "cost" : 0,
  "cost_currency" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "termination-point" : [ null ],

```

```
"network" : [ null ],
"link" : [ null ]
}
```

Update link information

```
PUT /topology-service/link/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	link{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/link/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
}
```

```

"latitude" : "string",
"longitude" : "string",
"address" : {
  "street" : "string",
  "street2" : "string",
  "city" : "string",
  "state" : "string",
  "zip_code" : "string",
  "country" : "string"
},
"link_type" : { },
"state" : { },
"direction" : { },
"access_link" : "<<_csp-topology-service_xsd_boolean>>",
"monitored_state" : {
  "state" : "string",
  "details" : "string"
},
"linkname" : "string",
"subscribed_bandwidth" : 0,
"provider" : "string",
"cost" : 0,
"cost_currency" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",

```

```
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"termination-point" : [ null ],
"network" : [ null ],
"link" : [ null ]
}
```

Delete a single link

```
DELETE /topology-service/link/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/link/0"
```

Network

Collection of termination points with connectivity.

Add a new network

POST /topology-service/network

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>network{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>network{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/topology-service/network"`

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
  }
}
```

```

    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "network_type" : { },
  "topo" : { },
  "management-state" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "link" : [ null ],
  "network" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    }
  ]
}

```



```

    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "network_type" : { },
  "topo" : { },
  "management-state" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  } ]
},
"display-name" : "string",
"link" : [ null ],
"network" : [ null ]
}

```

Get the network list

```
GET /topology-service/network
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< network > array

Example HTTP request

Request path

```
"/topology-service/network"
```

Example HTTP response

Response 200

```
"array"
```

Get a single network

```
GET /topology-service/network/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	network{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/network/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "network_type" : { },
  "topo" : { },
  "management-state" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
```

```

    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "link" : [ null ],
  "network" : [ null ]
}

```

Update network information

```
PUT /topology-service/network/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	network{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/network/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "network_type" : { },
  "topo" : { },
  "management-state" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
```

```
"owner-access" : 0,
"global-access" : 0,
"share" : [ {
  "tenant" : "string",
  "tenant_access" : 0
} ],
},
"display-name" : "string",
"link" : [ null ],
"network" : [ null ]
}
```

Delete a single network

```
DELETE /topology-service/network/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/network/0"
```

Pop

POPs in the topology.

Add a new pop

POST /topology-service/pop

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		pop{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	pop{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/topology-service/pop"

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
```

```

    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "pop_type" : { },
  "contact" : {
    "name" : "string",
    "email" : "string",
    "phone" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "device" : [ null ],
  "vim" : [ null ],
  "ems" : [ null ],
  "site" : [ null ]
}

```


Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "pop_type" : { },
  "contact" : {
    "name" : "string",
    "email" : "string",
    "phone" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
```

```
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "device" : [ null ],
  "vim" : [ null ],
  "ems" : [ null ],
  "site" : [ null ]
}
```

Get the pop list

```
GET /topology-service/pop
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< pop > array

Example HTTP request

Request path

```
"/topology-service/pop"
```

Example HTTP response

Response 200

```
"array"
```

Get a single pop

```
GET /topology-service/pop/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	pop{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/pop/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "pop_type" : { },
  "contact" : {
```

```

    "name" : "string",
    "email" : "string",
    "phone" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "device" : [ null ],
  "vim" : [ null ],
  "ems" : [ null ],
  "site" : [ null ]
}

```

Update pop information

PUT /topology-service/pop/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	pop{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/pop/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
}
```

```

"pop_type" : { },
"contact" : {
  "name" : "string",
  "email" : "string",
  "phone" : "string"
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"device" : [ null ],
"vim" : [ null ],
"ems" : [ null ],
"site" : [ null ]
}

```

Delete a single pop

```
DELETE /topology-service/pop/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/pop/0"
```

Region-dc

Regional data centers in the topology.

Add a new region-dc

```
POST /topology-service/region-dc
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		region-dc{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	region-dc{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/region-dc"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
```



```

    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"pop" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",

```

```
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"pop" : [ null ]
}
```

Get the region-dc list

```
GET /topology-service/region-dc
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< region-dc > array

Example HTTP request

Request path

```
"/topology-service/region-dc"
```

Example HTTP response

Response 200

```
"array"
```

Get a single region-dc

```
GET /topology-service/region-dc/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	region-dc{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/region-dc/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
}
```

```

"latitude" : "string",
"longitude" : "string",
"address" : {
  "street" : "string",
  "street2" : "string",
  "city" : "string",
  "state" : "string",
  "zip_code" : "string",
  "country" : "string"
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"pop" : [ null ]
}

```

Update region-dc information

```
PUT /topology-service/region-dc/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	region-dc{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/region-dc/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  }
}
```

```

},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"pop" : [ null ]
}

```

Delete a single region-dc

```
DELETE /topology-service/region-dc/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/region-dc/0"
```

Remove-pop

Remove POP and associated VIM assuming that devices detached using device-detach API.

Execute remove-pop RPC

```
POST /topology-service/remove-pop
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		remove-pop-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	remove-pop-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/remove-pop"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "pop" : [ {
      "name" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Remove-vim

Remove VIM from POP.

Execute remove-vim RPC

```
POST /topology-service/remove-vim
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		remove-vim-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	remove-vim-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/remove-vim"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "remove_respools" : true,
    "vim" : [ {
      "name" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Service-chain

Collection of service chains.

[Add a new service-chain](#)

```
POST /topology-service/service-chain
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		service-chain{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	service-chain{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/service-chain"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
```

```

"longitude" : "string",
"address" : {
  "street" : "string",
  "street2" : "string",
  "city" : "string",
  "state" : "string",
  "zip_code" : "string",
  "country" : "string"
},
"service_type" : { },
"management-state" : "string",
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"device" : [ null ],
"network" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "service_type" : { },
  "management-state" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  }
}

```

```
  },
  "display-name" : "string",
  "device" : [ null ],
  "network" : [ null ]
}
```

Get the service-chain list

```
GET /topology-service/service-chain
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< service-chain > array

Example HTTP request

Request path

```
"/topology-service/service-chain"
```

Example HTTP response

Response 200

```
"array"
```

Get a single service-chain

```
GET /topology-service/service-chain/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	service-chain{id}
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/service-chain/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "service_type" : { },
  "management-state" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    }
  }
}
```

```
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "device" : [ null ],
  "network" : [ null ]
}
```

Update service-chain information

PUT /topology-service/service-chain/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	service-chain{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/service-chain/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "service_type" : { },
  "management-state" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    }
  }
}
```



```
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "device" : [ null ],
  "network" : [ null ]
}
```

Delete a single service-chain

DELETE /topology-service/service-chain/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/service-chain/0"
```

Site

Tenant site.

Add a new site

```
POST /topology-service/site
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>site{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>site{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site"
```

Request body

```
{
  "properties" : {
```

```

    "property" : [ {
        "name" : "string"
    } ]
},
"db_id" : { },
"latitude" : "string",
"longitude" : "string",
"address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
},
"description" : "string",
"update_number" : 0,
"state" : { },
"contact" : {
    "name" : "string",
    "email" : "string",
    "phone" : "string"
},
"cloud_service" : { },
"site_type" : { },
"device_templates" : { },
"selected_wan_links" : "string",
"topo_role" : { },
"region" : { },
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},

```

```

"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"vim" : [ null ],
"device" : [ null ],
"department" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "description" : "string",
  "update_number" : 0,
  "state" : { },
  "contact" : {
    "name" : "string",
    "email" : "string",
    "phone" : "string"
  },
  "cloud_service" : { },
  "site_type" : { },
  "device_templates" : { },

```

```
"selected_wan_links" : "string",
"topo_role" : { },
"region" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"vim" : [ null ],
"device" : [ null ],
"department" : [ null ]
}
```

Get the site list

GET /topology-service/site

Responses

HTTP Code	Description	Schema
200	Successful operation	< site > array

Example HTTP request

Request path

```
"/topology-service/site"
```

Example HTTP response

Response 200

```
"array"
```

Get a single site

```
GET /topology-service/site/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	site{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "description" : "string",
  "update_number" : 0,
  "state" : { },
  "contact" : {
    "name" : "string",
    "email" : "string",
    "phone" : "string"
  },
  "cloud_service" : { },
  "site_type" : { },
  "device_templates" : { },
  "selected_wan_links" : "string",
  "topo_role" : { },
  "region" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
```

```

    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "vim" : [ null ],
  "device" : [ null ],
  "department" : [ null ]
}

```

Update site information

PUT /topology-service/site/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	site{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "description" : "string",
  "update_number" : 0,
  "state" : { },
  "contact" : {
    "name" : "string",
    "email" : "string",
    "phone" : "string"
  },
  "cloud_service" : { },
  "site_type" : { },
  "device_templates" : { },
  "selected_wan_links" : "string",
  "topo_role" : { },
  "region" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",

```

```

    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"vim" : [ null ],
"device" : [ null ],
"department" : [ null ]
}

```

Delete a single site

```
DELETE /topology-service/site/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content

HTTP Code	Description	Schema
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site/0"
```

Site-group

A group of sites.

Add a new site-group

```
POST /topology-service/site-group
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		site-group{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	site-group{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site-group"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "update_number" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
```

```

    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "site" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "update_number" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",

```

```
    "modifier" : "string",
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "site" : [ null ]
}
```

Get the site-group list

```
GET /topology-service/site-group
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< site-group > array

Example HTTP request

Request path

```
"/topology-service/site-group"
```

Example HTTP response

Response 200

```
"array"
```

Get a single site-group

```
GET /topology-service/site-group/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	site-group{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site-group/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "update_number" : 0,
  "id-perms" : {
```

```

"permissions" : {
  "owner" : "string",
  "owner_access" : 0,
  "group" : "string",
  "group_access" : 0,
  "other_access" : 0
},
"uuid" : {
  "uuid_mslong" : 0,
  "uuid_lslong" : 0
},
"enable" : true,
"description" : "string",
"user-visible" : true,
"creator" : "string",
"modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"site" : [ null ]
}

```

Update site-group information

PUT /topology-service/site-group/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	site-group{id}
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site-group/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "update_number" : 0,
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    }
  }
}
```

```

    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string",
"site" : [ null ]
}

```

Delete a single site-group

```
DELETE /topology-service/site-group/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content

HTTP Code	Description	Schema
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/site-group/0"
```

Termination-point

Termination point of a network device or VNF.

Add a new termination-point

```
POST /topology-service/termination-point
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		termination-point{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	termination-point{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/termination-point"
```

Request body

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "topo_role" : { },
  "interface_name" : "string",
  "interface_type" : { },
  "vlan-id" : "<<_csp-topology-service_xsd_unsignedshort>>",
  "ip-prefix" : { },
  "component" : { },
  "zone" : "string",
  "is_breakout" : "<<_csp-topology-service_xsd_boolean>>",
  "management-state" : "string",
  "monitored_state" : {
    "state" : "string",
    "details" : "string"
  },
  "interface-alias" : "string",
  "traffic-type" : "string",
  "gateway-ip" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    }
  },

```

```

    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "department" : [ null ],
  "network" : [ null ],
  "termination-point" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "topo_role" : { },
  "interface_name" : "string",
  "interface_type" : { },
  "vlan-id" : "<<_csp-topology-service_xsd_unsignedshort>>",
  "ip-prefix" : { },

```

```

"component" : { },
"zone" : "string",
"is_breakout" : "<<_csp-topology-service_xsd_boolean>>",
"management-state" : "string",
"monitored_state" : {
  "state" : "string",
  "details" : "string"
},
"interface-alias" : "string",
"traffic-type" : "string",
"gateway-ip" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"department" : [ null ],
"network" : [ null ],
"termination-point" : [ null ]
}

```

[Get the termination-point list](#)

```
GET /topology-service/termination-point
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< termination-point > array

Example HTTP request

Request path

```
"/topology-service/termination-point"
```

Example HTTP response

Response 200

```
"array"
```

Get a single termination-point

```
GET /topology-service/termination-point/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	termination-point{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/termination-point/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "topo_role" : { },
  "interface_name" : "string",
  "interface_type" : { },
  "vlan-id" : "<<_csp-topology-service_xsd_unsignedshort>>",
  "ip-prefix" : { },
  "component" : { },
  "zone" : "string",
  "is_breakout" : "<<_csp-topology-service_xsd_boolean>>",
  "management-state" : "string",
  "monitored_state" : {
    "state" : "string",
    "details" : "string"
  },
  "interface-alias" : "string",
  "traffic-type" : "string",
  "gateway-ip" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
```



```
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"department" : [ null ],
"network" : [ null ],
"termination-point" : [ null ]
}
```

Update termination-point information

PUT /topology-service/termination-point/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	termination-point{id}
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/termination-point/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "topo_role" : { },
  "interface_name" : "string",
  "interface_type" : { },
  "vlan-id" : "<<_csp-topology-service_xsd_unsignedshort>>",
  "ip-prefix" : { },
  "component" : { },
  "zone" : "string",
  "is_breakout" : "<<_csp-topology-service_xsd_boolean>>",
```

```

"management-state" : "string",
"monitored_state" : {
  "state" : "string",
  "details" : "string"
},
"interface-alias" : "string",
"traffic-type" : "string",
"gateway-ip" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"department" : [ null ],
"network" : [ null ],
"termination-point" : [ null ]
}

```

Delete a single termination-point

```
DELETE /topology-service/termination-point/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/termination-point/0"
```

Vim

VIMs in the topology.

Add a new vim

```
POST /topology-service/vim
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>vim{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>vim{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content

HTTP Code	Description	Schema
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/vim"
```

Request body

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "vim_type" : { },
  "resource_pool" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    }
  },
}
```

```

"uuid" : {
  "uuid_mslong" : 0,
  "uuid_lslong" : 0
},
"enable" : true,
"description" : "string",
"user-visible" : true,
"creator" : "string",
"modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"device" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "vim_type" : { },
  "resource_pool" : { },
  "id-perms" : {

```

```
"permissions" : {
  "owner" : "string",
  "owner_access" : 0,
  "group" : "string",
  "group_access" : 0,
  "other_access" : 0
},
"uuid" : {
  "uuid_mslong" : 0,
  "uuid_lslong" : 0
},
"enable" : true,
"description" : "string",
"user-visible" : true,
"creator" : "string",
"modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"device" : [ null ]
}
```

Get the vim list

GET /topology-service/vim

Responses

HTTP Code	Description	Schema
200	Successful operation	< vim > array

Example HTTP request

Request path

"/topology-service/vim"

Example HTTP response

Response 200

```
"array"
```

Get a single vim

```
GET /topology-service/vim/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	vim{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/vim/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
}
```



```

"db_id" : { },
"latitude" : "string",
"longtitude" : "string",
"address" : {
  "street" : "string",
  "street2" : "string",
  "city" : "string",
  "state" : "string",
  "zip_code" : "string",
  "country" : "string"
},
"vim_type" : { },
"resource_pool" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"device" : [ null ]
}

```

[Update vim information](#)

PUT /topology-service/vim/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	vim{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/topology-service/vim/0"

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "db_id" : { },
  "latitude" : "string",
  "longtitude" : "string",
  "address" : {
    "street" : "string",
    "street2" : "string",
```

```

    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "vim_type" : { },
  "resource_pool" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "device" : [ null ]
}

```

Delete a single vim

```
DELETE /topology-service/vim/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/topology-service/vim/0"
```

9.14.3. Definitions

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : ["AclRuleType"]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : "string"	string
match_condition <i>optional</i>	Example : "string"	string
rule_uuid <i>optional</i>	Example : "string"	string

CentralDcAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

CentralDcPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

CloudInternetNetworkType

Name	Description	Schema
onboard <i>optional</i>	Set to true to import named virtual network object from VIM; set to false to create a virtual network in VIM with the specified name. In both cases link VIM object to entry in local database object by using the same name. Example : true	boolean
route_target <i>optional</i>	list of route targets of Internet. Example : "string"	string
subnet <i>optional</i>	list of subnet IP addresses of Internet. Example : "string"	string
vl_name <i>optional</i>	Name of virtual network to create. Example : "string"	string
vld_name <i>optional</i>	VLD name in NSD. Example : "string"	string

CloudMgmtNetworkType

Name	Description	Schema
onboard <i>optional</i>	Set to true to import named virtual network object from VIM; set to false to create a virtual network in VIM with the specified name. In both cases link VIM object to entry in local database object by using the same name. Example : true	boolean
route_target <i>optional</i>	List of route targets of mgmt net. Example : "string"	string

Name	Description	Schema
subnet <i>optional</i>	List of subnet IP addresses of mgmt net. Example : <code>"string"</code>	string
vl_name <i>optional</i>	Name of virtual network to create. Example : <code>"string"</code>	string
vld_name <i>optional</i>	VLD name in NSD. Example : <code>"string"</code>	string

CloudResourcePoolType

Name	Description	Schema
compute_zone <i>optional</i>	Corresponding availability zone name in Contrail VIM. Example : <code>"string"</code>	string
name <i>optional</i>	Resource pool name in CSP VIM service. Example : <code>"string"</code>	string

CloudVimServiceProfilesType

Name	Description	Schema
default_service_profile_name <i>optional</i>	Name of default service profile. Optional. Example : <code>"string"</code>	string
service_profiles <i>optional</i>	Example : <code>"VimServiceProfilesServiceProfilesType"</code>	VimServiceProfilesServiceProfilesType

DepartmentAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : <code>"string"</code>	string
country <i>optional</i>	Country name. Optional. Example : <code>"string"</code>	string
state <i>optional</i>	State name. Default : <code>"unknown"</code> Example : <code>"string"</code>	string
street <i>optional</i>	Street name and number. Example : <code>"string"</code>	string
street2 <i>optional</i>	Street name and number. Example : <code>"string"</code>	string
zip_code <i>optional</i>	Zip code. Example : <code>"string"</code>	string

DepartmentPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : <code>["PropertiesPropertyType"]</code>	<code>< PropertiesPropertyType ></code> array

DeviceAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

DeviceAuthenticationKeyBasedType

Name	Description	Schema
user_id <i>optional</i>	Device ID. Example : "string"	string

DeviceAuthenticationOptionsCredentialType

Name	Description	Schema
password <i>optional</i>	Example : "string"	string
username <i>optional</i>	Example : "string"	string

DeviceAuthenticationOptionsType

Name	Description	Schema
auth-key <i>optional</i>	Example : "string"	string
credential <i>optional</i>	Example : "DeviceAuthenticationOptionsCredentialType"	DeviceAuthenticationOptionsCredentialType

DeviceAuthenticationPasswordBasedType

Name	Description	Schema
password <i>optional</i>	Device password. Example : "string"	string
username <i>optional</i>	Device user name. Example : "string"	string

DeviceAuthenticationType

Name	Description	Schema
key_based <i>optional</i>	Example : <code>"DeviceAuthenticationKeyBasedType"</code>	DeviceAuthenticationKeyBasedType
password_based <i>optional</i>	Example : <code>"DeviceAuthenticationPasswordBasedType"</code>	DeviceAuthenticationPasswordBasedType

DeviceComponentType

Device component—either GWR, JCP, or none.

Type : enum (JCP, GWR, none)

DeviceDetachInputDeviceType

Name	Description	Schema
device_uuid <i>optional</i>	Topology device UUID. Example : <code>"string"</code>	string

DeviceDetachOutputDeviceIdsType

Name	Description	Schema
device_id <i>optional</i>	IDs of EMS devices to be deleted. Example : <code>"string"</code>	string
reason <i>optional</i>	Reason for failure, if available. Example : <code>"string"</code>	string
response <i>optional</i>	Delete device response. Example : <code>"string"</code>	enum (success, in-progress, failed)

DeviceDetach_InputType

Name	Description	Schema
device <i>optional</i>	Example : <code>["DeviceDetachInputDeviceType"]</code>	< DeviceDetachInputDeviceType > array
job_name_prefix <i>optional</i>	Descriptive job name prefix of less than 16 characters. Example : <code>"string"</code>	string

DeviceDetach_OutputType

Name	Description	Schema
device_ids <i>optional</i>	Example : <code>["DeviceDetachOutputDeviceIdsType"]</code>	< DeviceDetachOutputDeviceIdsType > array
job_id <i>optional</i>	Job ID for this job. Example : <code>"string"</code>	string
jobid <i>optional</i>	Job UUID for NSO device deletion. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

Name	Description	Schema
reason <i>optional</i>	Reason for failure, if available. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

DeviceDiscoverInputDeviceType

Name	Description	Schema
authentication <i>optional</i>	Example : "DeviceAuthenticationType"	DeviceAuthenticationType
device_ip <i>optional</i>	Device IP addresses. Example : "string"	string
device_type <i>optional</i>	Device role in topology. One device can have few roles. Example : "string"	enum (pe, ipsec_concentrator, cpe, dc_gateway, router, vrr, vnf)
family <i>optional</i>	Device family. Example : "string"	string
name <i>optional</i>	Device name. Example : "string"	string
pop_id <i>optional</i>	Creates a link between discovered device and given pop_id. Example : "string"	string

DeviceDiscover_InputType

Name	Description	Schema
device <i>optional</i>	Example : ["DeviceDiscoverInputDeviceType"]	< DeviceDiscoverInputDeviceType > array
job_name_prefix <i>optional</i>	Descriptive job name prefix of less than 16 characters. Example : "string"	string

DeviceDiscover_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

DeviceOwnerType

Service managing the device.

Type : enum (ems, nso)

DevicePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : <code>"PropertiesPropertyType"</code>	<code>PropertiesPropertyType</code>

DeviceRoleType

Device type.

Type : enum (pe, ipsec_concentrator, cpe, dc_gateway, router, vrr, vnf)

DevicesHubsType

Name	Description	Schema
device_db_id <i>optional</i>	EMS specific db_id of hub device. Example : <code>"string"</code>	string
device_id <i>optional</i>	UUID of hub device. Example : <code>"string"</code>	string

DevicesTerminationPointsType

Name	Description	Schema
component <i>optional</i>	Device component; either GWR, JCP, or none. Example : <code>"string"</code>	enum (JCP, GWR, none)
cost <i>optional</i>	Monthly cost for the WAN link. Example : <code>0</code>	integer(int32)
cost_currency <i>optional</i>	Currency unit; use only one of USD, EUR, INR, or other accepted three-character strings for currency. Example : <code>"string"</code>	string
department <i>optional</i>	UUID of the department that is associated with the termination point. Example : <code>"string"</code>	string
department_fq_name <i>optional</i>	FQ name of the department that is associated with the termination point. Example : <code>"string"</code>	string
gateway_ip <i>optional</i>	Gateway IP address. Example : <code>"string"</code>	string
interface_alias <i>optional</i>	Alias of the interface. Example : <code>"string"</code>	string
interface_name <i>optional</i>	The interface name of the termination point. Example : <code>"string"</code>	string
interface_type <i>optional</i>	Either logical or physical. Example : <code>"string"</code>	string
ip_prefix <i>optional</i>	IP prefix of the termination point. Example : <code>"string"</code>	string
properties <i>optional</i>	Example : <code>"TerminationPointsPropertiesType"</code>	<code>TerminationPointsPropertiesType</code>

Name	Description	Schema
provider <i>optional</i>	Service provider name for the WAN link. Example : "string"	string
subscribed_bandwidth <i>optional</i>	Subscribed bandwidth for the WAN link. Example : 0	integer(int32)
traffic_type <i>optional</i>	Type of traffic in the interface. Example : "string"	string
vpn <i>optional</i>	UUID of the VPN that is associated with the termination point. Example : "string"	string
vpn_fq_name <i>optional</i>	FQ name of the VPN that is associated with the termination point. Example : "string"	string

DevicesZonesType

Name	Description	Schema
is_breakout <i>optional</i>	Interface for breakout. Example : true	boolean
is_vpn <i>optional</i>	Interface for VPN. Example : true	boolean
zone <i>optional</i>	Zone [dept-name or trusted/untrusted] to which the termination point belongs. Example : "string"	string

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

EmsAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string

Name	Description	Schema
zip_code <i>optional</i>	Zip code. Example : <code>"string"</code>	string

EmsPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : <code>["PropertiesPropertyType"]</code>	< PropertiesPropertyType > array

GetDepartmentByUuidsOutputValueType

Name	Description	Schema
device_refs <i>optional</i>	Example : <code>"ValueDeviceRefsType"</code>	ValueDeviceRefsType
fq_name <i>optional</i>	FQ Name of the object. Example : <code>"string"</code>	string
id_perms <i>optional</i>	Example : <code>"ValueIdPermsType"</code>	ValueIdPermsType
lan_segment_refs <i>optional</i>	Example : <code>"ValueLanSegmentRefsType"</code>	ValueLanSegmentRefsType
site_refs <i>optional</i>	Example : <code>"ValueSiteRefsType"</code>	ValueSiteRefsType
uuid <i>optional</i>	UUID of department object. Example : <code>"string"</code>	string
zones <i>optional</i>	Zones associated with the department. Example : <code>"string"</code>	string

GetDepartmentByUuids_InputType

Name	Description	Schema
detail <i>optional</i>	If set to true it will recursively expand internal references inside the object. Example : <code>true</code>	boolean
object_uuids <i>optional</i>	UUIDs of the department objects. If omitted or empty, all available objects are returned. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

GetDepartmentByUuids_OutputType

Name	Description	Schema
value <i>optional</i>	Example : <code>["GetDepartmentByUuidsOutputValueType"]</code>	< GetDepartmentByUuidsOutputValueType > array

GetDepartmentInfoOutputLanSegmentsType

Name	Description	Schema
fq_name <i>optional</i>	FQ name of the LAN segment. Example : "string"	string
interface_names <i>optional</i>	List of interface names of the LAN port; for example ge-0/0/0. Example : "string"	string
ip_subnet <i>optional</i>	IP address prefix. Example : "string"	string
ip_subnet_uuid <i>optional</i>	UUID of IP subnet in shared object database. Example : "string"	string
lan_ports <i>optional</i>	LAN ports list. Example : "string"	string
uuid <i>optional</i>	UUID of the LAN segment. Example : "string"	string

GetDepartmentInfoOutputTerminationPointsType

Name	Description	Schema
gateway_ip <i>optional</i>	Gateway IP address. Example : "string"	string
interface_alias <i>optional</i>	Interface alias. Example : "string"	string
interface_name <i>optional</i>	The name of the interface for the termination point. Example : "string"	string
interface_type <i>optional</i>	Type of interface, either logical or physical. Example : "string"	string
ip_prefix <i>optional</i>	IP prefix for the termination point. Example : "string"	string
traffic_type <i>optional</i>	Traffic type in the interface. Example : "string"	string
vpn <i>optional</i>	VPN to which the department is attached. Example : "string"	string
vpn_fq_name <i>optional</i>	FQ name of the VPN to which department is attached. Example : "string"	string

GetDepartmentInfo_InputType

Name	Description	Schema
department-id <i>optional</i>	ID for the department about which you are requesting information. Example : "string"	string
device-db-id <i>optional</i>	EMS specific db_id of device where we want dept information. Example : "string"	string
device-id <i>optional</i>	UUID of device from which you want dept information. Example : "string"	string

GetDepartmentInfo_OutputType

Name	Description	Schema
lan-segments <i>optional</i>	Example : ["GetDepartmentInfoOutputLanSegmentsType"]	< GetDepartmentInfoOutputLanSegmentsType > array
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)
termination_points <i>optional</i>	Example : ["GetDepartmentInfoOutputTerminationPointsType"]	< GetDepartmentInfoOutputTerminationPointsType > array
zone <i>optional</i>	Same as department name. Example : "string"	string

GetDevicesOutputDevicesType

Name	Description	Schema
as_number <i>optional</i>	Autonomous system number. Example : "string"	string
device_db_id <i>optional</i>	EMS specific db_id reference to the device. Example : "string"	string
device_family <i>optional</i>	Name of the device family. Example : "string"	string
device_id <i>optional</i>	UUID reference to the device. Example : "string"	string
device_template_id <i>optional</i>	Device deployment template UUID for the site. Example : "string"	string
hubs <i>optional</i>	Example : "DevicesHubsType"	DevicesHubsType
ipam_pool_id <i>optional</i>	IP Pool UUID allocated by IPAM service. Example : "string"	string
site_id <i>optional</i>	Reference to the site. Example : "string"	string
termination_points <i>optional</i>	Example : "DevicesTerminationPointsType"	DevicesTerminationPointsType
topo_role <i>optional</i>	Role device plays in topology, as in spoke or hub. Default : "both" Example : "string"	enum (hub, spoke, both, none)

GetDevices_InputType

Name	Description	Schema
device-db-ids <i>optional</i>	EMS specific db_ids of specific devices to be included in query; if both device-ids and device-db-ids are excluded, all devices of specific type will be returned. Example : <code>"string"</code>	string
device-ids <i>optional</i>	UUIDs of specific devices to be included in query; if both device-ids and device-db-ids are excluded, all devices of specific type will be returned. Example : <code>"string"</code>	string
tenant-id <i>optional</i>	Input tenant ID. Example : <code>"string"</code>	string
tenant-name <i>optional</i>	Input tenant name. Example : <code>"string"</code>	string
topo-role <i>optional</i>	Filter on topo-role = hub, spoke or both. Example : <code>"string"</code>	string

GetDevices_OutputType

Name	Description	Schema
devices <i>optional</i>	Example : <code>["GetDevicesOutputDevicesType"]</code>	< GetDevicesOutputDevicesType > array
reason <i>optional</i>	Reason for failure. Example : <code>"string"</code>	string
status <i>optional</i>	Success or failure. Example : <code>"string"</code>	enum (success, in-progress, failed)

GetSiteByUuidsOutputValueType

Name	Description	Schema
address <i>optional</i>	Example : <code>"ValueAddressType"</code>	ValueAddressType
department_refs <i>optional</i>	Example : <code>"ValueDepartmentRefsType"</code>	ValueDepartmentRefsType
device_refs <i>optional</i>	Example : <code>"ValueDeviceRefsType"</code>	ValueDeviceRefsType
fq_name <i>optional</i>	FQ Name of the object Example : <code>"string"</code>	string
id_perms <i>optional</i>	Example : <code>"ValueIdPermsType"</code>	ValueIdPermsType
state <i>optional</i>	State of the site. Default : <code>"unknown"</code> Example : <code>"string"</code>	enum (up, down, unknown)
topo_role <i>optional</i>	The topology role of the site. Default : <code>"both"</code> Example : <code>"string"</code>	enum (hub, spoke, both, none)
uuid <i>optional</i>	UUID of site object. Example : <code>"string"</code>	string

GetSiteByUuids_InputType

Name	Description	Schema
detail <i>optional</i>	If set to true, recursively expands internal references inside the object. Example : <code>true</code>	boolean
object_uuids <i>optional</i>	UUIDs of the site objects. If omitted or empty, all available objects are returned. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : <code>"string"</code>	string
state <i>optional</i>	Filter to return sites with the state you indicate. Default returns all sites regardless of state. Default : <code>"unknown"</code> Example : <code>"string"</code>	string

GetSiteByUuids_OutputType

Name	Description	Schema
value <i>optional</i>	Example : [<code>"GetSiteByUuidsOutputValueType"</code>]	< GetSiteByUuidsOutputValueType > array

GetSiteGroupByUuidsOutputValueType

Name	Description	Schema
fq_name <i>optional</i>	FQ Name of the object. Example : <code>"string"</code>	string
id_perms <i>optional</i>	Example : <code>"ValueIdPermsType"</code>	ValueIdPermsType
site_refs <i>optional</i>	Example : <code>"ValueSiteRefsType"</code>	ValueSiteRefsType
uuid <i>optional</i>	UUID of site group object. Example : <code>"string"</code>	string

GetSiteGroupByUuids_InputType

Name	Description	Schema
detail <i>optional</i>	If set to true it will recursively expand internal references inside the object. Example : <code>true</code>	boolean
object_uuids <i>optional</i>	UUIDs of the site group objects. If omitted or empty, all available objects are returned. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : <code>"string"</code>	string

GetSiteGroupByUuids_OutputType

Name	Description	Schema
value <i>optional</i>	Example : ["GetSiteGroupByUuidsOutputValueType"]	< GetSiteGroupByUuidsOutputValueType > array

GetZoneInfoOutputDevicesType

Name	Description	Schema
device_id <i>optional</i>	UUID reference to the device. Example : "string"	string
device_type <i>optional</i>	Device type. Example : "string"	enum (pe, ipsec_concentrator, cpe, dc_gateway, router, vrr, vnf)
site_group_name <i>optional</i>	Site-group to which device belongs. Example : "string"	string
site_name <i>optional</i>	Site to which device belongs. Example : "string"	string
topo_role <i>optional</i>	Hub or spoke. Default : "both" Example : "string"	enum (hub, spoke, both, none)
zones <i>optional</i>	Example : "DevicesZonesType"	DevicesZonesType

GetZoneInfo_InputType

Name	Description	Schema
device-types <i>optional</i>	Optional - A filter - returns only devices of specified types. Example : "string"	string
site-group-names <i>optional</i>	Optional - A filter - returns devices belonging to these site groups. Example : "string"	string
site-names <i>optional</i>	Optional - A filter - returns devices belonging to these sites. Example : "string"	string
topo-role <i>optional</i>	Optional [spoke or hub]; if not specified all devices returned. Example : "string"	string

GetZoneInfo_OutputType

Name	Description	Schema
devices <i>optional</i>	Example : ["GetZoneInfoOutputDevicesType"]	< GetZoneInfoOutputDevicesType > array
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : <code>"string"</code>	string
description <i>optional</i>	Example : <code>"string"</code>	string
enable <i>optional</i>	Example : <code>true</code>	boolean
modifier <i>optional</i>	Example : <code>"string"</code>	string
permissions <i>optional</i>	Example : <code>"PermType"</code>	PermType
user-visible <i>optional</i>	Example : <code>true</code>	boolean
uuid <i>optional</i>	Example : <code>"UuidType"</code>	UuidType

ImportPopInputPopType

Name	Description	Schema
address <i>optional</i>	Example : <code>"PopAddressType"</code>	PopAddressType
coordinates <i>optional</i>	Example : <code>"PopCoordinatesType"</code>	PopCoordinatesType
dc_name <i>optional</i>	Name of the CSO region by which this POP is managed. Example : <code>"string"</code>	string
device <i>optional</i>	Example : <code>"PopDeviceType"</code>	PopDeviceType
ems <i>optional</i>	Example : <code>"PopEmsType"</code>	PopEmsType
name <i>optional</i>	POP name. Example : <code>"string"</code>	string
vim <i>optional</i>	Example : <code>"PopVimType"</code>	PopVimType

ImportPop_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	Descriptive job name prefix, less than 16 characters. Example : <code>"string"</code>	string
pop <i>optional</i>	Example : <code>["ImportPopInputPopType"]</code>	< ImportPopInputPopType > array

ImportPop_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	Returns job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

IpAddressType

Gateway IP address.

Type : string

IpPrefixType

Terminationpoint IP prefix.

Type : string

LanPortsType

list of lan ports

Type : string

LanSegmentAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

LanSegmentPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

LanSegmentStateType

State of LAN segments on the device.

Type : enum (lan_segments_modelled, lan_segments_configured, lan_segments_vpn_attached)

LinkAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

LinkDirectionType

Connectivity direction.

Type : enum (uni, bi)

LinkLinkTypeType

The specific type of link.

Type : enum (ip_sec, gre, internet, mpls)

LinkMonitoredStateType

Name	Description	Schema
details <i>optional</i>	Additional information if available , if state is down. Example : "string"	string
state <i>optional</i>	Monitoring state of the link, based on last received tunnel state notification. Default : "unknown" Example : "string"	enum (up, down, unknown)

LinkPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

LinkStateType

State of the link.

Type : enum (access_modelled, ott_modelled, ott_activated, vpn_routing_enabled, ott_provisioned)

NetworkAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

NetworkNetworkTypeType

The type of the network.

Type : enum (l2vpn, l3vpn, vlan, lsp, vpn)

NetworkPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

NetworkTopoType

The topology of the network.

Type : enum (p2p, mesh, hub_spoke, partial_mesh, broadcast)

PermType

Name	Description	Schema
group <i>optional</i>	Example : <code>"string"</code>	string
group_access <i>optional</i>	Example : <code>0</code>	integer(int32)
other_access <i>optional</i>	Example : <code>0</code>	integer(int32)
owner <i>optional</i>	Default : <code>"ems"</code> Example : <code>"string"</code>	string
owner_access <i>optional</i>	Example : <code>0</code>	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : <code>0</code>	integer(int32)
owner <i>optional</i>	Default : <code>"ems"</code> Example : <code>"string"</code>	string
owner-access <i>optional</i>	Example : <code>0</code>	integer(int32)
share <i>optional</i>	Example : <code>["ShareType"]</code>	< ShareType > array

PopAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : <code>"string"</code>	string
country <i>optional</i>	Country name. Optional. Example : <code>"string"</code>	string
state <i>optional</i>	State name. Default : <code>"unknown"</code> Example : <code>"string"</code>	enum (up, down, unknown)
street <i>optional</i>	Street name and number. Example : <code>"string"</code>	string
street2 <i>optional</i>	Street name and number. Example : <code>"string"</code>	string
zip_code <i>optional</i>	Zip code. Example : <code>"string"</code>	string

PopContactType

Name	Description	Schema
email <i>optional</i>	Contact email. Example : <code>"string"</code>	string
name <i>optional</i>	Contact name. Example : <code>"string"</code>	string

Name	Description	Schema
phone <i>optional</i>	Contact phone number. Example : "string"	string

PopCoordinatesType

Name	Description	Schema
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string

PopDeviceType

Name	Description	Schema
assigned_device_profile <i>optional</i>	Name of the device profile assigned to this device. For the vCPE case, this device profile contains configuration templates for two UI workflows: 1) one workflow can be invoked after device is discovered to configure the device as DC gateway with BGP peering to Contrail, management & internet VRF configuration. This workflow shall be invoked once after PoP import workflow for all tenants. 2) Another workflow to be invoked per customer site to configure the BGP peering and site VRF. This workflow is to be invoked after onboarding the site. For the uCPE case, this device profile contains the configuration template for the ZTP workflow that configures the IPsec concentrator device for the OTT link from uCPE device. Example : "string"	string
authentication <i>optional</i>	Example : "DeviceAuthenticationType"	DeviceAuthenticationType
device_ip <i>optional</i>	Router management IP addresses. Example : "string"	string
family <i>optional</i>	Router device family. Example : "string"	string
internet_gateway <i>optional</i>	Required for IPsec devices. Collection of interfaces exposed for ipsec vpn tunnel creation. That address will be used to create VPN tunnel in the solution. Address must be enabled for access. Example : "string"	string
management_state <i>optional</i>	Optional Flag for CSP device discovery. If set to 'managed', import-pop will try to discover device and only if discovery is successful, will cause device to be created in in the topology. If management state is set to 'unmanaged', device will be created in topology only, and will not be managed by the CSP solution. Default : "managed" Example : "string"	enum (managed, unmanaged)
name <i>optional</i>	Router name. Example : "string"	string
pnf_package <i>optional</i>	Name of package providing metadata and configuration templates needed to program a PNF device for service chain attachments Example : "string"	string
properties <i>optional</i>	Example : "DevicePropertiesType"	DevicePropertiesType

PopEmsType

Name	Description	Schema
auth_url <i>optional</i>	EMS authentication URL. Example : "string"	string
ip <i>optional</i>	EMS management IP address. Example : "string"	string
name <i>optional</i>	EMS name. Example : "string"	string
password <i>optional</i>	EMS authentication password. Example : "string"	string
username <i>optional</i>	EMS authentication user name. Example : "string"	string
vendor <i>optional</i>	EMS vendor name. Example : "string"	string
version <i>optional</i>	EMS version. Example : "string"	string

PopPopTypeType

POP type. uCPE solutions must have one administrative POP.

Type : enum (administrative, regular)

PopPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

PopVimType

Name	Description	Schema
cloud <i>optional</i>	Example : "VimCloudType"	VimCloudType
name <i>optional</i>	VIM name. Example : "string"	string
vim_type <i>optional</i>	VIM type, either cloud or UCPE. Default : "uCPE" Example : "string"	string

ProjectAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string

Name	Description	Schema
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

ProjectPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

PropertiesPropertyType

Name	Description	Schema
name <i>optional</i>	property name Example : "string"	string

PropertiesType

Name	Description	Schema
name <i>optional</i>	Example : "string"	string

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string
rule_object <i>optional</i>	Example : "string"	string
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

RegionDcAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

RegionDcPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

RemovePopInputPopType

Name	Description	Schema
name <i>optional</i>	POP name. Example : "string"	string

RemovePop_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	Descriptive job name prefix, less than 16 characters. Example : <code>"string"</code>	string
pop <i>optional</i>	Example : <code>["RemovePopInputPopType"]</code>	< RemovePopInputPopType > array

RemovePop_OutputType

Name	Description	Schema
job_id <i>optional</i>	ID for this job. Example : <code>"string"</code>	string
jobid <i>optional</i>	Return job UUID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string
reason <i>optional</i>	Reason for failure. Example : <code>"string"</code>	string
status <i>optional</i>	Success or failure. Example : <code>"string"</code>	enum (success, in-progress, failed)

RemoveVimInputVimType

Name	Description	Schema
name <i>optional</i>	VIM name. Example : <code>"string"</code>	string

RemoveVim_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	Descriptive job name prefix of less than 16 characters. Example : <code>"string"</code>	string
remove_respons <i>optional</i>	Removes resource pool references from topology site objects. Example : <code>true</code>	boolean
vim <i>optional</i>	Example : <code>["RemoveVimInputVimType"]</code>	< RemoveVimInputVimType > array

RemoveVim_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : <code>"string"</code>	string
jobid <i>optional</i>	Returns job UUID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

Name	Description	Schema
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

ServiceChainAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

ServiceChainPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

ServiceChainServiceTypeType

Type of the service chain.

Type : enum (ucpe, cloud)

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string
tenant_access <i>optional</i>	Example : 0	integer(int32)

SiteAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string

Name	Description	Schema
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

SiteCloudServiceType

Cloud service.

Type : enum (EDGE, HUB, NONE)

SiteContactType

Name	Description	Schema
email <i>optional</i>	Contact email. Example : "string"	string
name <i>optional</i>	Contact name. Example : "string"	string
phone <i>optional</i>	Contact phone number. Example : "string"	string

SiteGroupAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

SiteGroupPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

SitePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

SiteSiteTypeType

Site type.

Type : enum (on_premise, cloud)

SiteStateType

Site state: CREATED - the site is just created. CONFIGURED - all the wan links are configured. PENDING-CONFIGURATION - one/more wan link(s) are added, but the link configuration is still pending. PROVISIONED - the site/devices in the site are provisioned and ready for service. State transition in simple case: CREATED->CONFIGURED->PROVISIONED. If user intends to edit the site, for example add a new wan link, state transition happens as below: CREATED->CONFIGURED->PENDING-CONFIGURATION->CONFIGURED->PROVISIONED.

Type : enum (CREATED, CONFIGURED, PENDING-CONFIGURATION, PROVISIONED)

TerminationPointAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

TerminationPointInterfaceTypeType

Interface type—physical or logical.

Type : enum (physical, logical)

TerminationPointMonitoredStateType

Name	Description	Schema
details <i>optional</i>	Additional information if available and if state is down. Example : <code>"string"</code>	string
state <i>optional</i>	Monitoring state of the link, based on last received tunnel state notification. Default : <code>"unknown"</code> Example : <code>"string"</code>	enum (up, down, unknown)

TerminationPointPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : [<code>"PropertiesPropertyType"</code>]	< PropertiesPropertyType > array

TerminationPointsPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : <code>"PropertiesType"</code>	PropertiesType

ToporoleType

Termination point topology role.

Type : enum (hub, spoke, both, none)

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : <code>0</code>	integer(int64)
uuid_mslong <i>optional</i>	Example : <code>0</code>	integer(int64)

ValueAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : <code>"string"</code>	string
country <i>optional</i>	Country name. Optional. Example : <code>"string"</code>	string
state <i>optional</i>	State name. Default : <code>"unknown"</code> Example : <code>"string"</code>	enum (up, down, unknown)
street <i>optional</i>	Street name and number. Example : <code>"string"</code>	string
street2 <i>optional</i>	Street name and number. Example : <code>"string"</code>	string

Name	Description	Schema
zip_code <i>optional</i>	Zip code. Example : "string"	string

ValueDepartmentRefsType

Name	Description	Schema
to <i>optional</i>	FQ Name of the object. Example : "string"	string
uuid <i>optional</i>	Department UUID. Example : "string"	string

ValueDeviceRefsType

Name	Description	Schema
device_db_id <i>optional</i>	DB ID of the device. Example : "string"	string
device_family <i>optional</i>	Device family. Example : "string"	string
to <i>optional</i>	Object's FQ Name. Example : "string"	string
topo_role <i>optional</i>	Termination point's topology role. Default : "both" Example : "string"	enum (hub, spoke, both, none)
uuid <i>optional</i>	Device UUID. Example : "string"	string

ValueIdPermsType

Name	Description	Schema
last_modified <i>optional</i>	Stores the time the object was last modified. Example : "string"	string

ValueLanSegmentRefsType

Name	Description	Schema
ip_subnet <i>optional</i>	IP address prefix. Example : "string"	string
ip_subnet_uuid <i>optional</i>	UUID of IP subnet in shared object database. Example : "string"	string
lan_ports <i>optional</i>	List of lan ports. Example : "string"	string
to <i>optional</i>	Object's FQ name. Example : "string"	string
uuid <i>optional</i>	Lan segment UUID. Example : "string"	string

ValueSiteRefsType

Name	Description	Schema
state <i>optional</i>	State of the site. Default : "unknown" Example : "string"	enum (up, down, unknown)
to <i>optional</i>	FQ Name of the object. Example : "string"	string
topo_role <i>optional</i>	Site's topology role. Default : "both" Example : "string"	enum (hub, spoke, both, none)
uuid <i>optional</i>	Site UUID. Example : "string"	string

VimAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Country name. Optional. Example : "string"	string
state <i>optional</i>	State name. Default : "unknown" Example : "string"	string
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

VimCloudType

Name	Description	Schema
address <i>optional</i>	VIM management IP address. Example : "string"	string
auth_url <i>optional</i>	Authentication URL of the VIM if its IP different from management address. Example : "string"	string
default_domain <i>optional</i>	VIM default domain. Example : "string"	string
default_tenant <i>optional</i>	VIM default tenant. Example : "string"	string
internet_network <i>optional</i>	Example : "CloudInternetNetworkType"	CloudInternetNetworkType
mgmt_network <i>optional</i>	Example : "CloudMgmtNetworkType"	CloudMgmtNetworkType

Name	Description	Schema
password <i>optional</i>	VIM authentication password. Example : "string"	string
resource_pool <i>optional</i>	Example : "CloudResourcePoolType"	CloudResourcePoolType
username <i>optional</i>	VIM authentication user name. Example : "string"	string
vim_service_profiles <i>optional</i>	Example : "CloudVimServiceProfilesType"	CloudVimServiceProfilesType

VimPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesPropertyType"]	< PropertiesPropertyType > array

VimServiceProfilesServiceProfilesType

Name	Description	Schema
domain_name <i>optional</i>	Name of the infra domain. Example : "string"	string
password <i>optional</i>	Password used for the tenant user. Example : "string"	string
service_profile_name <i>optional</i>	Name of the service profile in VIM instance. Example : "string"	string
tenant_name <i>optional</i>	Name of the infra tenant. Example : "string"	string
user_name <i>optional</i>	Name of the tenant user. Example : "string"	string

VimType

Indicate UCPE or cloud.

Type : string

YangUuidType

UUID of the corresponding object in another service.

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : "RbacRuleEntriesType"	RbacRuleEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

central-dc

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

central-dc{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "CentralDcAddressType"	CentralDcAddressType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pop <i>optional</i>	Example : ["[csp-topology-service_central-dc_id_pop]"]	< central-dc{id}_pop > array
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "CentralDcPropertiesType"	CentralDcPropertiesType
region-dc <i>optional</i>	Example : ["[csp-topology-service_central-dc_id_region-dc]"]	< central-dc{id}_region-dc > array

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
domain <i>optional</i>	Example : ["[csp-topology-service_config-root_id_domain]"]	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : ["[csp-topology-service_config-root_id_global-system-config]"]	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

department

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

department{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : <code>"DepartmentAddressType"</code>	DepartmentAddressType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : <code>"YangUuidType"</code>	YangUuidType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
lan-segment <i>optional</i>	Example : <code>["_csp-topology-service_department_id_lan-segment"]</code>	< department{id}_lan-segment > array
latitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	string
longitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	string
network <i>optional</i>	Example : <code>["_csp-topology-service_department_id_network"]</code>	< department{id}_network > array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : <code>"DepartmentPropertiesType"</code>	DepartmentPropertiesType
update_number <i>optional</i>	Update number that gets bumped each time this object is modified. Example : <code>0</code>	integer(int32)
vpn <i>optional</i>	VPN name in case we get it during onboard-tenant RPC. Example : <code>"string"</code>	string

device

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

device-detach-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeviceDetach_InputType"</code>	DeviceDetach_InputType

device-detach-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeviceDetach_OutputType"</code>	DeviceDetach_OutputType

device-discover-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeviceDiscover_InputType"</code>	DeviceDiscover_InputType

device-discover-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeviceDiscover_OutputType"</code>	DeviceDiscover_OutputType

device{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : <code>"DeviceAddressType"</code>	DeviceAddressType
app_license <i>optional</i>	Application license. Example : <code>"string"</code>	string
as-number <i>optional</i>	Autonomous system number. Example : <code>"string"</code>	string
authentication_options <i>optional</i>	Device authentication options. Example : <code>"DeviceAuthenticationOptionsType"</code>	DeviceAuthenticationOptionsType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : <code>"YangUuidType"</code>	YangUuidType
device <i>optional</i>	Example : <code>["_csp-topology-service_device_id_device"]</code>	<code>< device{id}_device ></code> array
device-template-id <i>optional</i>	Device deployment template uuid for the site. Example : <code>"YangUuidType"</code>	YangUuidType
device_family <i>optional</i>	Device family. Example : <code>"string"</code>	string
device_type <i>optional</i>	Device type. Example : <code>"DeviceRoleType"</code>	DeviceRoleType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType

Name	Description	Schema
ipam-pool-id <i>optional</i>	IP Pool uuid allocated by IPAM service. Example : <code>"YangUuidType"</code>	YangUuidType
lan-segment <i>optional</i>	Example : <code>["[_csp-topology-service_device_id_lan-segment]"]</code>	<code>< device{id} _lan-segment > array</code>
latitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	string
longitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	string
management-state <i>optional</i>	Management state of the device. Example : <code>"string"</code>	string
mgmt_ip <i>optional</i>	Management IP of the device or VNF. Example : <code>"string"</code>	string
owner <i>optional</i>	Service managing the device. Example : <code>"DeviceOwnerType"</code>	DeviceOwnerType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
platform <i>optional</i>	Platform/hardware model. Example : <code>"string"</code>	string
properties <i>optional</i>	The place to store dynamic properties for objects. Example : <code>"DevicePropertiesType"</code>	DevicePropertiesType
signature_install_status <i>optional</i>	Installation status of signature. Example : <code>"string"</code>	string
signature_version <i>optional</i>	Version of signature. Example : <code>0</code>	integer(int32)
software_release <i>optional</i>	Junos version/release number. Example : <code>"string"</code>	string
status <i>optional</i>	Device status. Example : <code>"string"</code>	string
termination-point <i>optional</i>	Example : <code>["[_csp-topology-service_device_id_termination-point]"]</code>	<code>< device{id} _termination-point > array</code>
vendor <i>optional</i>	Vendor name of the device or VNF. Example : <code>"string"</code>	string

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[_csp-topology-service_domain_id_api-access-list]"]	< domain{id}_api-access-list > array
central-dc <i>optional</i>	Example : ["[_csp-topology-service_domain_id_central-dc]"]	< domain{id}_central-dc > array
display-name <i>optional</i>	Example : "string"	string
domain-limits <i>optional</i>	Example : "DomainLimitsType"	DomainLimitsType
ems <i>optional</i>	Example : ["[_csp-topology-service_domain_id_ems]"]	< domain{id}_ems > array
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[_csp-topology-service_domain_id_namespace]"]	< domain{id}_namespace > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pop <i>optional</i>	Example : ["[_csp-topology-service_domain_id_pop]"]	< domain{id}_pop > array
project <i>optional</i>	Example : ["[_csp-topology-service_domain_id_project]"]	< domain{id}_project > array
region-dc <i>optional</i>	Example : ["[_csp-topology-service_domain_id_region-dc]"]	< domain{id}_region-dc > array
vim <i>optional</i>	Example : ["[_csp-topology-service_domain_id_vim]"]	< domain{id}_vim > array

ems

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

ems{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "EmsAddressType"	EmsAddressType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType

Name	Description	Schema
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "EmsPropertiesType"	EmsPropertiesType

get-department-info-input

Name	Description	Schema
input <i>optional</i>	Example : "GetDepartmentInfo_InputType"	GetDepartmentInfo_InputType

get-department-info-output

Name	Description	Schema
output <i>optional</i>	Example : "GetDepartmentInfo_OutputType"	GetDepartmentInfo_OutputType

get-devices-input

Name	Description	Schema
input <i>optional</i>	Example : "GetDevices_InputType"	GetDevices_InputType

get-devices-output

Name	Description	Schema
output <i>optional</i>	Example : "GetDevices_OutputType"	GetDevices_OutputType

get-zone-info-input

Name	Description	Schema
input <i>optional</i>	Example : "GetZoneInfo_InputType"	GetZoneInfo_InputType

get-zone-info-output

Name	Description	Schema
output <i>optional</i>	Example : "GetZoneInfo_OutputType"	GetZoneInfo_OutputType

get_department_by_uuids-input

Name	Description	Schema
input <i>optional</i>	Example : "GetDepartmentByUuids_InputType"	GetDepartmentByUuids_InputType

get_department_by_uuids-output

Name	Description	Schema
output <i>optional</i>	Example : "GetDepartmentByUuids_OutputType"	GetDepartmentByUuids_OutputType

get_site_by_uuids-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSiteByUuids_InputType"	GetSiteByUuids_InputType

get_site_by_uuids-output

Name	Description	Schema
output <i>optional</i>	Example : "GetSiteByUuids_OutputType"	GetSiteByUuids_OutputType

get_site_group_by_uuids-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSiteGroupByUuids_InputType"	GetSiteGroupByUuids_InputType

get_site_group_by_uuids-output

Name	Description	Schema
output <i>optional</i>	Example : "GetSiteGroupByUuids_OutputType"	GetSiteGroupByUuids_OutputType

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string

Name	Description	Schema
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

import-pop-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ImportPop_InputType"</code>	ImportPop_InputType

import-pop-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ImportPop_OutputType"</code>	ImportPop_OutputType

lan-segment

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

lan-segment{id}

Name	Description	Schema
additional_config <i>optional</i>	Additional LAN segment config that are defined in the device templates. For example, we can have DHCP config for the LAN segment. Example : <code>"[_csp-topology-service_xsd_any]"</code>	xsd:any
address <i>optional</i>	Street address. Example : <code>"LanSegmentAddressType"</code>	LanSegmentAddressType
configured <i>optional</i>	True if LAN segment is configured on device. Example : <code>"[_csp-topology-service_xsd_boolean]"</code>	xsd:boolean
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : <code>"YangUuidType"</code>	YangUuidType
dhcp <i>optional</i>	Enable DHCP if true. Example : <code>"[_csp-topology-service_xsd_boolean]"</code>	xsd:boolean
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
interface_names <i>optional</i>	The list of interface-names of the LAN port example ge-0/0/0. Example : <code>"string"</code>	string

Name	Description	Schema
ip_subnet <i>optional</i>	IP address prefix. Example : "IpPrefixType"	IpPrefixType
ip_subnet_uuid <i>optional</i>	UUID of IP subnet in shared object database. Example : "YangUuidType"	YangUuidType
lan_ports <i>optional</i>	list of lan ports Example : "LanPortsType"	LanPortsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "LanSegmentPropertiesType"	LanSegmentPropertiesType
state <i>optional</i>	State of LAN segments on the device. Example : "LanSegmentStateType"	LanSegmentStateType
vlan <i>optional</i>	VALN ID. Example : "[_csp-topology-service_xsd_unsignedshort]"	xsd:unsignedShort

link

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

link{id}

Name	Description	Schema
access_link <i>optional</i>	Access link is between CE and PE, non access link is between PE and PE. Example : "[_csp-topology-service_xsd_boolean]"	xsd:boolean
address <i>optional</i>	Street address. Example : "LinkAddressType"	LinkAddressType
cost <i>optional</i>	Monthly cost for the WAN link. Example : 0	integer(int32)
cost_currency <i>optional</i>	Currency unit; use only one of USD, EUR, INR, or other accepted three-character strings for currency. Example : "string"	string
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
direction <i>optional</i>	Connectivity direction. Example : "LinkDirectionType"	LinkDirectionType
display-name <i>optional</i>	Example : "string"	string

Name	Description	Schema
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>
latitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	<code>string</code>
link <i>optional</i>	Example : <code>["_csp-topology-service_link_id_link"]</code>	<code>< link{id}_link ></code> array
link_type <i>optional</i>	The specific type of link. Example : <code>"LinkLinkTypeType"</code>	<code>LinkLinkTypeType</code>
linkname <i>optional</i>	Link name created by hybrid-access service. Link name corresponds with onboard_tenant wan_link_name. Example : <code>"string"</code>	<code>string</code>
longitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	<code>string</code>
monitored_state <i>optional</i>	Information about current link state. Example : <code>"LinkMonitoredStateType"</code>	<code>LinkMonitoredStateType</code>
network <i>optional</i>	Example : <code>["_csp-topology-service_link_id_network"]</code>	<code>< link{id}_network ></code> array
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>
properties <i>optional</i>	The place to store dynamic properties for objects. Example : <code>"LinkPropertiesType"</code>	<code>LinkPropertiesType</code>
provider <i>optional</i>	Service provider name for the WAN link. Example : <code>"string"</code>	<code>string</code>
state <i>optional</i>	State of the link. Example : <code>"LinkStateType"</code>	<code>LinkStateType</code>
subscribed_bandwidth <i>optional</i>	Subscribed bandwidth for the WAN link. Example : <code>0</code>	<code>integer(int32)</code>
termination-point <i>optional</i>	Example : <code>["_csp-topology-service_link_id_termination-point"]</code>	<code>< link{id}_termination-point ></code> array

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>

Name	Description	Schema
perms2 <i>optional</i>	Example : "PermType2"	PermType2

network

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

network{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "NetworkAddressType"	NetworkAddressType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
link <i>optional</i>	Example : ["[_csp-topology-service_network_id_link]"]	< network{id}_link > array
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
management-state <i>optional</i>	The management state of the network. Example : "string"	string
network <i>optional</i>	Example : ["[_csp-topology-service_network_id_network]"]	< network{id}_network > array
network_type <i>optional</i>	The type of the network. Example : "NetworkNetworkTypeType"	NetworkNetworkTypeType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "NetworkPropertiesType"	NetworkPropertiesType
topo <i>optional</i>	The topology of the network. Example : "NetworkTopoType"	NetworkTopoType

pop

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : <code>"string"</code>	string

pop{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : <code>"PopAddressType"</code>	PopAddressType
contact <i>optional</i>	Contact information. Example : <code>"PopContactType"</code>	PopContactType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : <code>"YangUuidType"</code>	YangUuidType
device <i>optional</i>	Example : <code>["_csp-topology-service_pop_id_device"]</code>	< pop{id}_device > array
display-name <i>optional</i>	Example : <code>"string"</code>	string
ems <i>optional</i>	Example : <code>["_csp-topology-service_pop_id_ems"]</code>	< pop{id}_ems > array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	string
longitude <i>optional</i>	Geo location in decimal degree. Example : <code>"string"</code>	string
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
pop_type <i>optional</i>	POP type. uCPE solutions must have one administrative POP. Example : <code>"PopPopTypeType"</code>	PopPopTypeType
properties <i>optional</i>	The place to store dynamic properties for objects. Example : <code>"PopPropertiesType"</code>	PopPropertiesType
site <i>optional</i>	Example : <code>["_csp-topology-service_pop_id_site"]</code>	< pop{id}_site > array
vim <i>optional</i>	Example : <code>["_csp-topology-service_pop_id_vim"]</code>	< pop{id}_vim > array

project

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

project{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : <code>"ProjectAddressType"</code>	ProjectAddressType

Name	Description	Schema
api-access-list <i>optional</i>	Example : ["[csp-topology-service_project_id_api-access-list]"]	< project{id}_api-access-list > array
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
department <i>optional</i>	Example : ["[csp-topology-service_project_id_department]"]	< project{id}_department > array
device <i>optional</i>	Example : ["[csp-topology-service_project_id_device]"]	< project{id}_device > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
namespace <i>optional</i>	Example : ["[csp-topology-service_project_id_namespace]"]	< project{id}_namespace > array
network <i>optional</i>	Example : ["[csp-topology-service_project_id_network]"]	< project{id}_network > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "ProjectPropertiesType"	ProjectPropertiesType
quota <i>optional</i>	Example : "QuotaType"	QuotaType
service-chain <i>optional</i>	Example : ["[csp-topology-service_project_id_service-chain]"]	< project{id}_service-chain > array
site <i>optional</i>	Example : ["[csp-topology-service_project_id_site]"]	< project{id}_site > array
site-group <i>optional</i>	Example : ["[csp-topology-service_project_id_site-group]"]	< project{id}_site-group > array

region-dc

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

region-dc{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "RegionDcAddressType"	RegionDcAddressType

Name	Description	Schema
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pop <i>optional</i>	Example : ["_csp-topology-service_region-dc_id_pop"]	< region-dc{id}_pop > array
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "RegionDcPropertiesType"	RegionDcPropertiesType

remove-pop-input

Name	Description	Schema
input <i>optional</i>	Example : "RemovePop_InputType"	RemovePop_InputType

remove-pop-output

Name	Description	Schema
output <i>optional</i>	Example : "RemovePop_OutputType"	RemovePop_OutputType

remove-vim-input

Name	Description	Schema
input <i>optional</i>	Example : "RemoveVim_InputType"	RemoveVim_InputType

remove-vim-output

Name	Description	Schema
output <i>optional</i>	Example : "RemoveVim_OutputType"	RemoveVim_OutputType

service-chain

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

service-chain{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "ServiceChainAddressType"	ServiceChainAddressType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
device <i>optional</i>	Example : ["[_csp-topology-service_service-chain_id_device]"]	< service-chain{id}_device > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
management-state <i>optional</i>	Service chain management state. Example : "string"	string
network <i>optional</i>	Example : ["[_csp-topology-service_service-chain_id_network]"]	< service-chain{id}_network > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "ServiceChainPropertiesType"	ServiceChainPropertiesType
service_type <i>optional</i>	Type of the service chain. Example : "ServiceChainServiceTypeType"	ServiceChainServiceTypeType

site

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

site-group

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

site-group{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "SiteGroupAddressType"	SiteGroupAddressType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "SiteGroupPropertiesType"	SiteGroupPropertiesType
site <i>optional</i>	Example : ["[_csp-topology-service_site-group_id_site]"]	< site-group{id}_site > array
update_number <i>optional</i>	Update number that gets bumped each time this object is modified. Example : 0	integer(int32)

site{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "SiteAddressType"	SiteAddressType
cloud_service <i>optional</i>	Cloud service. Example : "SiteCloudServiceType"	SiteCloudServiceType
contact <i>optional</i>	Contact information. Example : "SiteContactType"	SiteContactType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
department <i>optional</i>	Example : ["[_csp-topology-service_site_id_department]"]	< site{id}_department > array
description <i>optional</i>	Description of the customer's site. Example : "string"	string
device <i>optional</i>	Example : ["[_csp-topology-service_site_id_device]"]	< site{id}_device > array
device_templates <i>optional</i>	List of device templates used by the devices in this site. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType

Name	Description	Schema
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "SitePropertiesType"	SitePropertiesType
region <i>optional</i>	CSO region which manages this site. Example : "YangUuidType"	YangUuidType
selected_wan_links <i>optional</i>	List of WAN links that this tenant cloud hub site is assigned or authorized to use. Example : "string"	string
site_type <i>optional</i>	Site type. Example : "SiteSiteTypeType"	SiteSiteTypeType
state <i>optional</i>	Site state: CREATED - the site is just created. CONFIGURED - all the wan links are configured. PENDING-CONFIGURATION - one/more wan link(s) are added, but the link configuration is still pending. PROVISIONED - the site/devices in the site are provisioned and ready for service. State transition in simple case: CREATED->CONFIGURED->PROVISIONED. If user intends to edit the site, for example add a new wan link, state transition happens as below: CREATED->CONFIGURED->PENDING-CONFIGURATION->CONFIGURED->PROVISIONED. Example : "SiteStateType"	SiteStateType
topo_role <i>optional</i>	The topology role of the site. Example : "ToporoleType"	ToporoleType
update_number <i>optional</i>	Update number that gets bumped each time this object is modified. Example : 0	integer(int32)
vim <i>optional</i>	Example : ["[_csp-topology-service_site_id_vim]"]	< site{id}_vim > array

termination-point

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

termination-point{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "TerminationPointAddressType"	TerminationPointAddressType
component <i>optional</i>	Device component—either GWR, JCP, or none. Example : "DeviceComponentType"	DeviceComponentType

Name	Description	Schema
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
department <i>optional</i>	Example : ["[_csp-topology-service_termination-point_id_department]"]	< termination-point{id}_department > array
display-name <i>optional</i>	Example : "string"	string
gateway-ip <i>optional</i>	Gateway IP address. Example : "IpAddressType"	IpAddressType
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
interface-alias <i>optional</i>	Interface alias. Example : "string"	string
interface_name <i>optional</i>	Interface name. Example : "string"	string
interface_type <i>optional</i>	Interface type—physical or logical. Example : "TerminationPointInterfaceTypeType"	TerminationPointInterfaceTypeType
ip-prefix <i>optional</i>	Terminationpoint IP prefix. Example : "IpPrefixType"	IpPrefixType
is_breakout <i>optional</i>	Identifies the interface for breakout to internet. Example : "[_csp-topology-service_xsd_boolean]"	xsd:boolean
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
management-state <i>optional</i>	Management state of the device. Example : "string"	string
monitored_state <i>optional</i>	Information about current link state. Example : "TerminationPointMonitoredStateType"	TerminationPointMonitoredStateType
network <i>optional</i>	Example : ["[_csp-topology-service_termination-point_id_network]"]	< termination-point{id}_network > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "TerminationPointPropertiesType"	TerminationPointPropertiesType
termination-point <i>optional</i>	Example : ["[_csp-topology-service_termination-point_id_termination-point]"]	< termination-point{id}_termination-point > array
topo_role <i>optional</i>	Termination point topology role. Example : "ToporoleType"	ToporoleType
traffic-type <i>optional</i>	Type of traffic in the interface. Example : "string"	string
vlan-id <i>optional</i>	The VLAN ID of the termination point if any. Example : "[_csp-topology-service_xsd_unsignedshort]"	xsd:unsignedShort

Name	Description	Schema
zone <i>optional</i>	Zone to which termination-point belongs. Example : "string"	string

vim

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

vim{id}

Name	Description	Schema
address <i>optional</i>	Street address. Example : "VimAddressType"	VimAddressType
db_id <i>optional</i>	UUID of the corresponding object in another service. Example : "YangUuidType"	YangUuidType
device <i>optional</i>	Example : ["[_csp-topology-service_vim_id_device]"]	< vim{id}_device > array
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
latitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo location in decimal degree. Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	The place to store dynamic properties for objects. Example : "VimPropertiesType"	VimPropertiesType
resource_pool <i>optional</i>	Available resource pools of cloud CPE. Example : "YangUuidType"	YangUuidType
vim_type <i>optional</i>	Indicate UCPE or cloud. Example : "VimType"	VimType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string

9.15. Tenant, Site and Service Manager (TSSM)

9.15.1. Overview

Use these API endpoints for general tenant, site and service management operations.

Version information

Version : 3.0

URI scheme

BasePath : /tssm

Schemes : HTTP

Tags

- start-device-activation : Start device activation.
- site-activate : Activate a site.
- property-meta : Meta information of provisioning property. Properties used in customer/site/link/target/nfv-service-profile must be defined in property-meta. The meta data is primarily for helping user to choose property and for backend to validate property input.
- onboard-tenant : Creates tenant in IAM, customer and sites in TSSM, allocates ip-pool for data and management per site.
- global-nfv-service-profile : A ref container for the service profiles visible to all customers.
- resource-pool : List of resource pools.
- delete-department-from-site : Deletes LAN configurations on devices at sites.
- create-sites : This API is intended for use by a tenant admin to create sites with specific requirements.

- `delete-site-from-vpn` : Delete site from VPN.
- `delete-department-from-vpn` : Delete department from VPN.
- `remove-site` : RPC to remove site.
- `site-deactivate` : Deactivate a site.
- `add-department-to-vpn` : Add department to VPN.
- `ship-device` : Add shipped device to a site. Device has not been activated yet.
- `add-delete-lan-segments` : Adds/Deletes LAN segments to devices.
- `configure-sites` : This API is intended for SP admin to configure sites for a specific tenant.
- `add-site-to-vpn` : Add site to VPN.
- `nfv-service-profile` : A service profile for a service that can be offered to a customer.
- `customer` : The customer of vCPE services.
- `site` : The site where the service to be delivered.
- `recall-device` : Recalls a shipped device, deletes all resources and references for this device, and then deletes the device.
- `pop` : List of pops.
- `nfv-service-instance` : The service instance created for a customer.
- `add-department-to-site` : Adds LAN configurations on devices at sites.

Produces

- `application/json`

9.15.2. Resources

Add-delete-lan-segments

Adds/Deletes LAN segments to devices.

Execute `add-delete-lan-segments` RPC

```
POST /tssm/add-delete-lan-segments
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		add-delete-lan-segments-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	add-delete-lan-segments-output
400	Invalid input supplied	No Content

HTTP Code	Description	Schema
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/add-delete-lan-segments"
```

Request body

```
{
  "input" : {
    "tenant_name" : "string",
    "devices" : [ {
      "device_name" : "string",
      "delete_lan_segments_list" : "string",
      "lan_segment" : {
        "lan_segment_name" : "string",
        "ip_prefix" : "string",
        "department" : "string",
        "dhcp" : true,
        "lan_ports" : "string"
      }
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Add-department-to-site

Adds LAN configurations on devices at sites.

Execute `add-department-to-site` RPC

```
POST /tssm/add-department-to-site
```

Parameters

Type	Name	Description	Schema	Default
Body	<code>input</code> <i>optional</i>		add-department-to-site-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	add-department-to-site-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/add-department-to-site"
```

Request body

```
{
  "input" : {
    "tenant_name" : "string",
    "departments" : "string",
    "sites" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Add-department-to-vpn

Add department to VPN.

Execute add-department-to-vpn RPC

POST /tssm/add-department-to-vpn

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		add-department-to-vpn-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	add-department-to-vpn-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content

HTTP Code	Description	Schema
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/add-department-to-vpn"
```

Request body

```
{
  "input" : {
    "tenant_name" : "string",
    "department_list" : [ {
      "department_name" : "string",
      "vpn_name" : "string",
      "site_list" : {
        "site_name" : "string",
        "device_list" : "string"
      }
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Add-site-to-vpn

Add site to VPN.

Execute add-site-to-vpn RPC

```
POST /tssm/add-site-to-vpn
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		add-site-to-vpn-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	add-site-to-vpn-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/add-site-to-vpn"
```

Request body

```

{
  "input" : {
    "wan_link_name" : "string",
    "wan_link_info" : {
      "wan_link_name" : "string",
      "local_interface" : "string",
      "wan_link_type" : "string",
      "traffic_type" : "string",
      "address_assignment" : "string",
      "static_ip_assignment" : {
        "ip_address" : "string",
        "gateway_ip" : "string"
      },
      "peer_router_name" : "string",
      "peer_ip_address" : "string",
      "peer_as_number" : "string"
    },
    "job_name_prefix" : "string",
    "site_uuid" : "string",
    "vpn_uuid" : "string",
    "device_id" : "string",
    "overlay_tunnel_info" : [ {
      "tunnel_type" : "string",
      "tunnel_endpoint_role" : "string",
      "vrf_name" : "string",
      "tunnel_source_ip" : "string",
      "tunnel_destination_ip" : "string",
      "peer_info" : {
        "peer_device" : "string",
        "internet_gw_ip" : "string",
        "interface_name" : "string"
      }
    } ]
  }
}

```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Configure-sites

This API is intended for SP admin to configure sites for a specific tenant.

Execute `configure-sites` RPC

POST `/tssm/configure-sites`

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		configure-sites-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	configure-sites-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/tssm/configure-sites"`

Request body

```

{
  "input" : {
    "job_name_prefix" : "string",
    "tenant_name" : "string",
    "site" : [ {
      "cloud_site_info" : {
        "router_info" : {
          "vrf_name" : "string",
          "router_name" : "string",
          "route_target" : "string",
          "left_virtual_networks" : {
            "right_network_name" : "string",
            "subnet" : "string"
          }
        },
        "pop_info" : {
          "pop_name" : "string",
          "route_target" : "string",
          "left_virtual_networks" : {
            "right_network_name" : "string",
            "subnet" : "string"
          }
        },
        "assigned_vim" : "string",
        "assigned_resource_pool" : "string",
        "internet_info" : {
          "virtual_network_name" : "string"
        }
      },
      "data_center_site_info" : {
        "pop_name" : "string",
        "route_target" : "string",
        "subnet" : "string",
        "vl_name" : "string",
        "onboard" : true,
        "assigned_vim" : "string",
        "assigned_resource_pool" : "string",
        "internet_info" : {
          "virtual_network_name" : "string"
        }
      },
      "on_premise_site_info" : {
        "ha_info" : {
          "ha_topology" : "string"
        }
      },
    ]
  }
}

```

```

"hashtag" : "string",
"site_group" : "string",
"site_role" : "string",
"hub_site" : "string",
"region" : "string",
"pop" : "string",
"device" : {
  "device_name" : "string",
  "device_template" : "string",
  "cpe_as_number" : "string",
  "device_details" : {
    "serial_number" : "string",
    "activation_code" : "string",
    "boot_image" : "string"
  },
  "oam_traffic" : {
    "gateway_ip" : "string",
    "ip_prefix" : "string"
  },
  "wan_link" : {
    "wan_link_name" : "string",
    "local_interface" : "string",
    "wan_link_type" : "string",
    "traffic_type" : "string",
    "address_assignment" : "string",
    "static_ip_assignment" : {
      "ip_address" : "string",
      "gateway_ip" : "string"
    },
    "peer_router_name" : "string",
    "peer_ip_address" : "string",
    "peer_as_number" : "string",
    "overlay_tunnel" : {
      "vpn_name" : "string",
      "tunnel_type" : "string",
      "tunnel_endpoint_role" : "string",
      "vrf_name" : "string",
      "tunnel_source_ip" : "string",
      "tunnel_destination_ip" : "string",
      "peer_info" : {
        "peer_device" : "string",
        "internet_gw_ip" : "string",
        "interface_name" : "string"
      }
    }
  },
  "lan_segment" : {

```

```

        "lan_segment_name" : "string",
        "lan_ports" : "string",
        "ip_prefix" : "string",
        "department" : "string",
        "dhcp" : true
    },
    },
    "site_template" : "string"
},
"cloud_hub_site_info" : {
    "hub_device" : "string",
    "wan_links" : "string",
    "vrf_name" : "string",
    "pop" : "string"
},
"hybrid_wan_site_info" : {
    "device_template_name" : "string",
    "device_name" : "string",
    "device_details" : {
        "serial_number" : "string",
        "activation_code" : "string",
        "boot_image" : "string"
    },
    "cpe_as_number" : "string",
    "access_info" : {
        "router_name" : "string",
        "router_as_number" : "string",
        "oam_traffic" : {
            "gateway_ip" : "string",
            "ip_prefix" : "string"
        },
        "wan_traffic" : {
            "wan_link_name" : "string",
            "wan_link_type" : "string",
            "tunnel_type" : "string",
            "vrf_name" : "string",
            "local_interface" : "string",
            "local_ip_prefix" : "string",
            "remote_ip_prefix" : "string",
            "ipsec_info" : {
                "ipsec_concentrator_name" : "string",
                "internet_gw_ip" : "string"
            }
        }
    }
},
"site_name" : "string",

```

```

"site_basic_properties" : {
  "site_description" : "string",
  "site_type" : "string",
  "site_role" : "string",
  "cloud_service" : "string",
  "site_group" : "string",
  "site_address" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "site_contact" : {
    "contact_name" : "string",
    "email_address" : "string",
    "phone_number" : "string"
  },
  "device_template" : {
    "template_name" : "string",
    "device_name" : "string",
    "wan_link_info" : {
      "wan_link" : "string",
      "wan_link_type" : "string",
      "subscribed_bandwidth" : 0,
      "provider" : "string",
      "cost" : 0,
      "cost_currency" : "string"
    },
    "lan_segment" : {
      "lan_segment_name" : "string",
      "lan_ports" : "string",
      "ip_prefix" : "string",
      "department" : "string",
      "dhcp" : true
    }
  },
  "properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  }
}

```

```
}
} ]
}
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Create-sites

This API is intended for use by a tenant admin to create sites with specific requirements.

Execute create-sites RPC

```
POST /tssm/create-sites
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		create-sites-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	create-sites-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/create-sites"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "tenant_name" : "string",
    "site" : [ {
      "site_name" : "string",
      "site_basic_properties" : {
        "site_description" : "string",
        "site_type" : "string",
        "site_role" : "string",
        "cloud_service" : "string",
        "site_group" : "string",
        "site_address" : {
          "street" : "string",
          "street2" : "string",
          "city" : "string",
          "state" : "string",
          "zip_code" : "string",
          "country" : "string"
        },
        "site_contact" : {
          "contact_name" : "string",
          "email_address" : "string",
          "phone_number" : "string"
        },
        "device_template" : {
          "template_name" : "string",
          "device_name" : "string",
          "wan_link_info" : {
            "wan_link" : "string",
            "wan_link_type" : "string",
            "subscribed_bandwidth" : 0,
            "provider" : "string",
            "cost" : 0,
            "cost_currency" : "string"
          },
          "lan_segment" : {
            "lan_segment_name" : "string",
```

```
        "lan_ports" : "string",
        "ip_prefix" : "string",
        "department" : "string",
        "dhcp" : true
    }
}
}
} ]
}
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Customer

The customer of vCPE services.

Add a new customer

```
POST /tssm/customer
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		customer{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	customer{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content

HTTP Code	Description	Schema
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/customer"
```

Request body

```
{
  "tenant_type" : { },
  "vim_service_profiles" : {
    "vim_name" : "string",
    "profile_name" : "string"
  },
  "contact_name" : "string",
  "deployment_scenario" : { },
  "networks" : {
    "network" : [ {
      "network_name" : "string",
      "vpn_id" : "string"
    } ]
  },
  "vpn_id" : { },
  "pnfid" : 0,
  "tenantid" : "string",
  "tenant_existed" : { },
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "service_properties" : {
    "name" : "string",
```



```

    "value" : "string"
  },
  "ui_layout" : {
    "id" : "string",
    "name" : "string",
    "topo_data" : "string"
  },
  "route_target" : "string",
  "subnet" : "string",
  "default_ssl_proxy_profile" : {
    "enabled" : true
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "pop" : [ null ],
  "resource-pool" : [ null ],
  "site" : [ null ],
  "nfv-service-instance" : [ null ],
  "nfv-service-profile" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "tenant_type" : { },
  "vim_service_profiles" : {
    "vim_name" : "string",
    "profile_name" : "string"
  },
  "contact_name" : "string",
  "deployment_scenario" : { },
  "networks" : {
    "network" : [ {
      "network_name" : "string",
      "vpn_id" : "string"
    } ]
  },
  "vpn_id" : { },
  "pnfid" : 0,
  "tenantid" : "string",
  "tenant_existed" : { },
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "service_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "ui_layout" : {
    "id" : "string",
    "name" : "string",
    "topo_data" : "string"
  },
  "route_target" : "string",
  "subnet" : "string",
  "default_ssl_proxy_profile" : {
    "enabled" : true
  },
  "id-perms" : {
    "permissions" : {

```

```
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"pop" : [ null ],
"resource-pool" : [ null ],
"site" : [ null ],
"nfv-service-instance" : [ null ],
"nfv-service-profile" : [ null ]
}
```

[Get the customer list](#)

```
GET /tssm/customer
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< customer > array

[Example HTTP request](#)

Request path

```
"/tssm/customer"
```

Example HTTP response

Response 200

```
"array"
```

Get a single customer

```
GET /tssm/customer/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	customer{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/customer/0"
```

Example HTTP response

Response 200

```
{
```

```

"tenant_type" : { },
"vim_service_profiles" : {
  "vim_name" : "string",
  "profile_name" : "string"
},
"contact_name" : "string",
"deployment_scenario" : { },
"networks" : {
  "network" : [ {
    "network_name" : "string",
    "vpn_id" : "string"
  } ]
},
"vpn_id" : { },
"pnfid" : 0,
"tenantid" : "string",
"tenant_existed" : { },
"properties" : {
  "property" : [ {
    "name" : "string"
  } ]
},
"user_defined_properties" : {
  "name" : "string",
  "value" : "string"
},
"service_properties" : {
  "name" : "string",
  "value" : "string"
},
"ui_layout" : {
  "id" : "string",
  "name" : "string",
  "topo_data" : "string"
},
"route_target" : "string",
"subnet" : "string",
"default_ssl_proxy_profile" : {
  "enabled" : true
},
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  }
}

```

```

    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string",
"pop" : [ null ],
"resource-pool" : [ null ],
"site" : [ null ],
"nfv-service-instance" : [ null ],
"nfv-service-profile" : [ null ]
}

```

Update customer information

```
PUT /tssm/customer/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	customer{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/customer/0"
```

Example HTTP response

Response 200

```
{
  "tenant_type" : { },
  "vim_service_profiles" : {
    "vim_name" : "string",
    "profile_name" : "string"
  },
  "contact_name" : "string",
  "deployment_scenario" : { },
  "networks" : {
    "network" : [ {
      "network_name" : "string",
      "vpn_id" : "string"
    } ]
  },
  "vpn_id" : { },
  "pnfid" : 0,
  "tenantid" : "string",
  "tenant_existed" : { },
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "service_properties" : {
```

```

    "name" : "string",
    "value" : "string"
  },
  "ui_layout" : {
    "id" : "string",
    "name" : "string",
    "topo_data" : "string"
  },
  "route_target" : "string",
  "subnet" : "string",
  "default_ssl_proxy_profile" : {
    "enabled" : true
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "pop" : [ null ],
  "resource-pool" : [ null ],
  "site" : [ null ],
  "nfv-service-instance" : [ null ],
  "nfv-service-profile" : [ null ]
}

```


Delete a single customer

```
DELETE /tssm/customer/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/customer/0"
```

Delete-department-from-site

Deletes LAN configurations on devices at sites.

Execute delete-department-from-site RPC

```
POST /tssm/delete-department-from-site
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		delete-department-from-site-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	delete-department-from-site-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/delete-department-from-site"
```

Request body

```
{
  "input" : {
    "tenant_name" : "string",
    "departments" : "string",
    "sites" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Delete-department-from-vpn

Delete department from VPN.

Execute delete-department-from-vpn RPC

```
POST /tssm/delete-department-from-vpn
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		delete-department-from-vpn-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	delete-department-from-vpn-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/delete-department-from-vpn"
```

Request body

```
{
  "input" : {
    "tenant_name" : "string",
    "department_list" : [ {
      "department_name" : "string",
      "vpn_name" : "string",
      "site_list" : {
        "site_name" : "string",
        "device_list" : "string"
      }
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Delete-site-from-vpn

Delete site from VPN.

Execute delete-site-from-vpn RPC

POST /tssm/delete-site-from-vpn

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		delete-site-from-vpn- input	

Responses

HTTP Code	Description	Schema
200	Successful operation	delete-site-from-vpn-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/delete-site-from-vpn"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "site_uuid" : "string",
    "vpn_uuid" : "string",
    "device_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Global-nfv-service-profile

A ref container for the service profiles visible to all customers.

Add a new global-nfv-service-profile

```
POST /tssm/global-nfv-service-profile
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		global-nfv-service-profile{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	global-nfv-service-profile{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/global-nfv-service-profile"
```

Request body

```

{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "nfv-service-profile" : [ null ]
}

```

Example HTTP response

Response 200

```
{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "nfv-service-profile" : [ null ]
}
```

Get the global-nfv-service-profile list

```
GET /tssm/global-nfv-service-profile
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< global-nfv-service-profile > array

Example HTTP request

Request path

```
"/tssm/global-nfv-service-profile"
```

Example HTTP response

Response 200

```
"array"
```

Get a single global-nfv-service-profile

```
GET /tssm/global-nfv-service-profile/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	global-nfv-service-profile{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/global-nfv-service-profile/0"
```

Example HTTP response

Response 200

```
{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "nfv-service-profile" : [ null ]
}
```

Update global-nfv-service-profile information

```
PUT /tssm/global-nfv-service-profile/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	global-nfv-service-profile{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/global-nfv-service-profile/0"
```

Example HTTP response

Response 200

```
{
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "nfv-service-profile" : [ null ]
}
```

Delete a single global-nfv-service-profile

```
DELETE /tssm/global-nfv-service-profile/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/global-nfv-service-profile/0"
```

Nfv-service-instance

The service instance created for a customer.

Add a new nfv-service-instance

```
POST /tssm/nfv-service-instance
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		nfv-service-instance{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	nfv-service-instance{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content

HTTP Code	Description	Schema
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-instance"
```

Request body

```
{
  "nfv_nsid" : { },
  "app_point" : {
    "app_point_type" : "string",
    "app_point_path" : "string"
  },
  "config_input" : {
    "vnf_config" : [ {
      "vnfid" : "string",
      "function_config" : {
        "functionid" : "string"
      }
    } ],
    "pnf_config" : [ {
      "pnf_device" : "string",
      "component_name" : "string",
      "pnf_address" : "string",
      "region" : "string",
      "pnf_transport" : {
        "ssh_options" : {
          "auth_key" : "string",
          "credential" : {
            "username" : "string",
            "password" : "string"
          }
        }
      }
    } ],
    "pnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "ccpe_service_config_variables" : "string"
```

```

},
"final_props" : {
  "property" : [ {
    "name" : "string"
  } ]
},
"state" : { },
"jsm_state" : { },
"flavour" : "string",
"pending_config_input" : {
  "vnf_config" : [ {
    "vnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "pnf_config" : [ {
    "pnf_device" : "string",
    "component_name" : "string",
    "pnf_address" : "string",
    "region" : "string",
    "pnf_transport" : {
      "ssh_options" : {
        "auth_key" : "string",
        "credential" : {
          "username" : "string",
          "password" : "string"
        }
      }
    },
    "pnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "ccpe_service_config_variables" : "string"
},
"pending_final_props" : {
  "property" : [ {
    "name" : "string"
  } ]
},
"pending_attributes" : {
  "nfv-service-profile" : "string",
  "flavour" : "string"
},
"user_name" : "string",

```

```

"job_info" : {
  "job_name" : "string",
  "jsm_job_name" : "string"
},
"progress" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string",
"nfv-service-profile" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "nfv_nsid" : { },
  "app_point" : {
    "app_point_type" : "string",
    "app_point_path" : "string"
  },
  "config_input" : {

```



```

"vnf_config" : [ {
  "vnfid" : "string",
  "function_config" : {
    "functionid" : "string"
  }
} ],
"pnf_config" : [ {
  "pnf_device" : "string",
  "component_name" : "string",
  "pnf_address" : "string",
  "region" : "string",
  "pnf_transport" : {
    "ssh_options" : {
      "auth_key" : "string",
      "credential" : {
        "username" : "string",
        "password" : "string"
      }
    }
  },
  "pnfid" : "string",
  "function_config" : {
    "functionid" : "string"
  }
} ],
"ccpe_service_config_variables" : "string",
},
"final_props" : {
  "property" : [ {
    "name" : "string"
  } ]
},
},
"state" : { },
"jsm_state" : { },
"flavour" : "string",
"pending_config_input" : {
  "vnf_config" : [ {
    "vnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  }
] ],
"pnf_config" : [ {
  "pnf_device" : "string",
  "component_name" : "string",
  "pnf_address" : "string",
  "region" : "string",

```

```

    "pnf_transport" : {
      "ssh_options" : {
        "auth_key" : "string",
        "credential" : {
          "username" : "string",
          "password" : "string"
        }
      }
    },
    "pnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "ccpe_service_config_variables" : "string"
},
"pending_final_props" : {
  "property" : [ {
    "name" : "string"
  } ]
},
"pending_attributes" : {
  "nfv-service-profile" : "string",
  "flavour" : "string"
},
"user_name" : "string",
"job_info" : {
  "job_name" : "string",
  "jsm_job_name" : "string"
},
"progress" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",

```

```
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "nfv-service-profile" : [ null ]
}
```

Get the nfv-service-instance list

```
GET /tssm/nfv-service-instance
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< nfv-service-instance > array

Example HTTP request

Request path

```
"/tssm/nfv-service-instance"
```

Example HTTP response

Response 200

```
"array"
```

Get a single nfv-service-instance

```
GET /tssm/nfv-service-instance/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	nfv-service-instance{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-instance/0"
```

Example HTTP response

Response 200

```
{
  "nfv_nsid" : { },
  "app_point" : {
    "app_point_type" : "string",
    "app_point_path" : "string"
  },
  "config_input" : {
    "vnf_config" : [ {
      "vnfid" : "string",
      "function_config" : {
        "functionid" : "string"
      }
    }
  ],
  "pnf_config" : [ {
    "pnf_device" : "string",
    "component_name" : "string",
    "pnf_address" : "string",
    "region" : "string",
```

```

    "pnf_transport" : {
      "ssh_options" : {
        "auth_key" : "string",
        "credential" : {
          "username" : "string",
          "password" : "string"
        }
      }
    },
    "pnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "ccpe_service_config_variables" : "string"
},
"final_props" : {
  "property" : [ {
    "name" : "string"
  } ]
},
"state" : { },
"jsm_state" : { },
"flavour" : "string",
"pending_config_input" : {
  "vnf_config" : [ {
    "vnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ]
},
"pnf_config" : [ {
  "pnf_device" : "string",
  "component_name" : "string",
  "pnf_address" : "string",
  "region" : "string",
  "pnf_transport" : {
    "ssh_options" : {
      "auth_key" : "string",
      "credential" : {
        "username" : "string",
        "password" : "string"
      }
    }
  }
},
  "pnfid" : "string",
  "function_config" : {

```

```

        "functionid" : "string"
    }
} ],
"ccpe_service_config_variables" : "string"
},
"pending_final_props" : {
    "property" : [ {
        "name" : "string"
    } ]
},
"pending_attributes" : {
    "nfv-service-profile" : "string",
    "flavour" : "string"
},
"user_name" : "string",
"job_info" : {
    "job_name" : "string",
    "jsm_job_name" : "string"
},
"progress" : { },
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
},

```

```
"display-name" : "string",
"nfv-service-profile" : [ null ]
}
```

Update nfv-service-instance information

```
PUT /tssm/nfv-service-instance/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	nfv-service-instance{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-instance/0"
```

Example HTTP response

Response 200

```
{
  "nfv_nsid" : { },
  "app_point" : {
    "app_point_type" : "string",
    "app_point_path" : "string"
  },
}
```

```

"config_input" : {
  "vnf_config" : [ {
    "vnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "pnf_config" : [ {
    "pnf_device" : "string",
    "component_name" : "string",
    "pnf_address" : "string",
    "region" : "string",
    "pnf_transport" : {
      "ssh_options" : {
        "auth_key" : "string",
        "credential" : {
          "username" : "string",
          "password" : "string"
        }
      }
    },
    "pnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "ccpe_service_config_variables" : "string"
},
"final_props" : {
  "property" : [ {
    "name" : "string"
  } ]
},
"state" : { },
"jsm_state" : { },
"flavour" : "string",
"pending_config_input" : {
  "vnf_config" : [ {
    "vnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "pnf_config" : [ {
    "pnf_device" : "string",
    "component_name" : "string",
    "pnf_address" : "string",

```



```

    "region" : "string",
    "pnf_transport" : {
      "ssh_options" : {
        "auth_key" : "string",
        "credential" : {
          "username" : "string",
          "password" : "string"
        }
      }
    },
    "pnfid" : "string",
    "function_config" : {
      "functionid" : "string"
    }
  } ],
  "ccpe_service_config_variables" : "string"
},
"pending_final_props" : {
  "property" : [ {
    "name" : "string"
  } ]
},
"pending_attributes" : {
  "nfv-service-profile" : "string",
  "flavour" : "string"
},
"user_name" : "string",
"job_info" : {
  "job_name" : "string",
  "jsm_job_name" : "string"
},
"progress" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,

```

```
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "nfv-service-profile" : [ null ]
}
```

Delete a single nfv-service-instance

```
DELETE /tssm/nfv-service-instance/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-instance/0"
```

Nfv-service-profile

A service profile for a service that can be offered to a customer.

Add a new nfv-service-profile

```
POST /tssm/nfv-service-profile
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		nfv-service-profile{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	nfv-service-profile{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-profile"
```

Request body

```
{
  "target_type" : { },
  "functions" : "string",
  "allowed_app_points" : { },
  "status" : { },
  "nsd_package" : { },
  "flavour" : "string",
  "ccpe_api_meta" : {
```

```

    "uri" : "string",
    "content_type" : "string",
    "accept" : "string"
  },
  "description" : "string",
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  },
  "customized_models" : {
    "customized_model" : [ {
      "app_point" : "string",
      "vnf_config" : {
        "vnfid" : "string",
        "function_config" : {
          "functionid" : "string"
        },
        "managed_by_ipm" : true
      },
      "pnf_config" : {
        "pnfid" : "string",
        "function_config" : {
          "functionid" : "string"
        }
      }
    } ],
    "ccpe_service_config_variables" : "string"
  } ],
  },
  "rendering_prop" : "string",
  "deployment_flag" : { },
  "category" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,

```

```

    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```

{
  "target_type" : { },
  "functions" : "string",
  "allowed_app_points" : { },
  "status" : { },
  "nsd_package" : { },
  "flavour" : "string",
  "ccpe_api_meta" : {
    "uri" : "string",
    "content_type" : "string",
    "accept" : "string"
  },
  "description" : "string",
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "customized_models" : {
    "customized_model" : [ {
      "app_point" : "string",
      "vnf_config" : {
        "vnfid" : "string",
        "function_config" : {
          "functionid" : "string"
        }
      },
      "managed_by_ipm" : true
    } ],
  },
}

```

```

    "pnf_config" : {
      "pnfid" : "string",
      "function_config" : {
        "functionid" : "string"
      }
    },
    "ccpe_service_config_variables" : "string"
  } ]
},
"rendering_prop" : "string",
"deployment_flag" : { },
"category" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}

```

Get the nfv-service-profile list

```
GET /tssm/nfv-service-profile
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< nfv-service-profile > array

Example HTTP request

Request path

```
"/tssm/nfv-service-profile"
```

Example HTTP response

Response 200

```
"array"
```

Get a single nfv-service-profile

```
GET /tssm/nfv-service-profile/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	nfv-service-profile{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-profile/0"
```

Example HTTP response

Response 200

```
{
  "target_type" : { },
  "functions" : "string",
  "allowed_app_points" : { },
  "status" : { },
  "nsd_package" : { },
  "flavour" : "string",
  "ccpe_api_meta" : {
    "uri" : "string",
    "content_type" : "string",
    "accept" : "string"
  },
  "description" : "string",
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "customized_models" : {
    "customized_model" : [ {
      "app_point" : "string",
      "vnf_config" : {
        "vnfid" : "string",
        "function_config" : {
          "functionid" : "string"
        }
      },
      "managed_by_ipm" : true
    } ],
    "pnf_config" : {
      "pnfid" : "string",
      "function_config" : {
        "functionid" : "string"
      }
    },
    "ccpe_service_config_variables" : "string"
  } ],
  "rendering_prop" : "string",
```



```
"deployment_flag" : { },
"category" : { },
"id-perms" : {
  "permissions" : {
    "owner" : "string",
    "owner_access" : 0,
    "group" : "string",
    "group_access" : 0,
    "other_access" : 0
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },
  "enable" : true,
  "description" : "string",
  "user-visible" : true,
  "creator" : "string",
  "modifier" : "string"
},
"perms2" : {
  "owner" : "string",
  "owner-access" : 0,
  "global-access" : 0,
  "share" : [ {
    "tenant" : "string",
    "tenant_access" : 0
  } ]
},
"display-name" : "string"
}
```

Update nfv-service-profile information

```
PUT /tssm/nfv-service-profile/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	nfv-service-profile{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-profile/0"
```

Example HTTP response

Response 200

```
{
  "target_type" : { },
  "functions" : "string",
  "allowed_app_points" : { },
  "status" : { },
  "nsd_package" : { },
  "flavour" : "string",
  "ccpe_api_meta" : {
    "uri" : "string",
    "content_type" : "string",
    "accept" : "string"
  },
  "description" : "string",
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "customized_models" : {
    "customized_model" : [ {
      "app_point" : "string",
      "vnf_config" : {
```

```

    "vnfid" : "string",
    "function_config" : {
        "functionid" : "string"
    },
    "managed_by_ipm" : true
},
"pnf_config" : {
    "pnfid" : "string",
    "function_config" : {
        "functionid" : "string"
    }
},
"ccpe_service_config_variables" : "string"
} ]
},
"rendering_prop" : "string",
"deployment_flag" : { },
"category" : { },
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
} ]
},
"display-name" : "string"
}

```

Delete a single nfv-service-profile

```
DELETE /tssm/nfv-service-profile/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/nfv-service-profile/0"
```

Onboard-tenant

Creates tenant in IAM, customer and sites in TSSM, allocates ip-pool for data and management per site.

Execute onboard-tenant RPC

```
POST /tssm/onboard-tenant
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		onboard-tenant-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	onboard-tenant-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/onboard-tenant"
```

Request body

```
{
  "input" : {
    "managed_wan_topology" : {
      "network" : {
        "network_name" : "string",
        "site" : {
          "cloud_site_info" : {
            "router_info" : {
              "vrf_name" : "string",
              "router_name" : "string",
              "route_target" : "string",
              "left_virtual_networks" : {
                "right_network_name" : "string",
                "subnet" : "string"
              }
            }
          },
          "pop_info" : {
            "pop_name" : "string",
            "route_target" : "string",
            "left_virtual_networks" : {
              "right_network_name" : "string",
              "subnet" : "string"
            }
          }
        }
      }
    }
  }
}
```

```

    "assigned_vim" : "string",
    "assigned_resource_pool" : "string",
    "internet_info" : {
        "virtual_network_name" : "string"
    }
},
"on_premise_site_info" : {
    "cpe_as_number" : "string",
    "access_info" : {
        "router_name" : "string",
        "router_as_number" : "string",
        "oam_traffic" : {
            "gateway_ip" : "string",
            "ip_prefix" : "string"
        },
        "wan_traffic" : {
            "wan_link_name" : "string",
            "wan_link_type" : "string",
            "tunnel_type" : "string",
            "vrf_name" : "string",
            "local_interface" : "string",
            "local_ip_prefix" : "string",
            "remote_ip_prefix" : "string",
            "ipsec_info" : {
                "ipsec_concentrator_name" : "string",
                "internet_gw_ip" : "string"
            }
        }
    }
},
"data_center_site_info" : {
    "pop_name" : "string",
    "route_target" : "string",
    "subnet" : "string",
    "vl_name" : "string",
    "onboard" : true,
    "assigned_vim" : "string",
    "assigned_resource_pool" : "string",
    "internet_info" : {
        "virtual_network_name" : "string"
    }
},
"site_name" : "string",
"site_description" : "string",
"properties" : {
    "property" : {
        "name" : "string"
    }
}

```

```

    }
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "service_properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "location" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "coordinates" : {
    "latitude" : "string",
    "longtitude" : "string"
  },
  "device_template_name" : "string"
}
}
},
"flex_wan_topology" : "<<_csp-tssm_onboardtenantinputflexwantopologytype>>",
"managed_wan_topology_v2" : {
  "site" : {
    "on_premise_site_info" : {
      "ha_info" : {
        "ha_topology" : "string"
      },
      "hashtag" : "string",
      "site_group" : "string",
      "site_role" : "string",
      "hub_site" : "string",
      "region" : "string",
      "pop" : "string",
      "device" : {
        "device_name" : "string",
        "device_template" : "string",
        "cpe_as_number" : "string",
        "device_details" : {
          "serial_number" : "string",
          "activation_code" : "string",

```

```

    "boot_image" : "string"
  },
  "oam_traffic" : {
    "gateway_ip" : "string",
    "ip_prefix" : "string"
  },
  "wan_link" : {
    "wan_link_name" : "string",
    "local_interface" : "string",
    "wan_link_type" : "string",
    "traffic_type" : "string",
    "address_assignment" : "string",
    "static_ip_assignment" : {
      "ip_address" : "string",
      "gateway_ip" : "string"
    },
    "peer_router_name" : "string",
    "peer_ip_address" : "string",
    "peer_as_number" : "string",
    "overlay_tunnel" : {
      "vpn_name" : "string",
      "tunnel_type" : "string",
      "tunnel_endpoint_role" : "string",
      "vrf_name" : "string",
      "tunnel_source_ip" : "string",
      "tunnel_destination_ip" : "string",
      "peer_info" : {
        "peer_device" : "string",
        "internet_gw_ip" : "string",
        "interface_name" : "string"
      }
    }
  },
  "lan_segment" : {
    "lan_segment_name" : "string",
    "lan_ports" : "string",
    "ip_prefix" : "string",
    "department" : "string",
    "dhcp" : true
  },
  "site_template" : "string"
},
"cloud_hub_site_info" : {
  "hub_device" : "string",
  "wan_links" : "string",
  "vrf_name" : "string",

```



```

    "pop" : "string"
  },
  "site_name" : "string",
  "tenant_name" : "string",
  "site_description" : "string",
  "properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "service_properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "location" : {
    "street" : "string",
    "street2" : "string",
    "city" : "string",
    "state" : "string",
    "zip_code" : "string",
    "country" : "string"
  },
  "coordinates" : {
    "latitude" : "string",
    "longtitude" : "string"
  }
}
},
"job_name_prefix" : "string",
"tenant_name" : "string",
"tenant_admin" : {
  "admin_user_name" : "string",
  "admin_user_password" : "string",
  "first_name" : "string",
  "last_name" : "string",
  "password_expiration_interval" : 0
},
"tenant_type" : "string",
"vim_service_profiles" : [ {
  "vim_name" : "string",
  "profile_name" : "string"
} ],

```

```

"properties" : {
  "property" : {
    "name" : "string"
  }
},
"user_defined_properties" : [ {
  "name" : "string",
  "value" : "string"
} ],
"service_properties" : [ {
  "name" : "string",
  "value" : "string"
} ],
"vpn" : [ {
  "vpn_name" : "string"
} ],
"departments" : [ {
  "department_name" : "string",
  "vpn_name" : "string"
} ],
"default_ssl_proxy_profile" : {
  "enabled" : true
}
}
}

```

Example HTTP response

Response 200

```

{
  "output" : {
    "jobid" : "string",
    "status" : "string",
    "reason" : "string"
  }
}

```

Pop

List of pops.

Add a new pop

POST /tssm/pop

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>pop{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>pop{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/pop"
```

Request body

```

{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the pop list

```
GET /tssm/pop
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< pop > array

Example HTTP request

Request path

```
"/tssm/pop"
```

Example HTTP response

Response 200

```
"array"
```

Get a single pop

```
GET /tssm/pop/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	pop{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/pop/0"
```

Example HTTP response

Response 200

```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update pop information

```
PUT /tssm/pop/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	pop{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/pop/0"
```

Example HTTP response

Response 200


```
{
  "properties" : {
    "property" : [ {
      "name" : "string"
    } ]
  },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single pop

```
DELETE /tssm/pop/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/pop/0"
```

Property-meta

Meta information of provisioning property. Properties used in customer/site/link/target/nfv-service-profile must be defined in property-meta. The meta data is primarily for helping user to choose property and for backend to validate property input.

Add a new property-meta

```
POST /tssm/property-meta
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		property-meta{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	property-meta{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content

HTTP Code	Description	Schema
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/property-meta"
```

Request body

```

{
  "value_syntax" : "string",
  "description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "value_syntax" : "string",
  "description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the property-meta list

```
GET /tssm/property-meta
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< property-meta > array

Example HTTP request

Request path

```
"/tssm/property-meta"
```

Example HTTP response

Response 200

```
"array"
```

Get a single property-meta

```
GET /tssm/property-meta/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	property-meta{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/property-meta/0"
```

Example HTTP response

Response 200

```
{
  "value_syntax" : "string",
  "description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update property-meta information

```
PUT /tssm/property-meta/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	property-meta{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/property-meta/0"
```

Example HTTP response

Response 200


```
{
  "value_syntax" : "string",
  "description" : "string",
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single property-meta

```
DELETE /tssm/property-meta/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/property-meta/0"
```

Recall-device

Recalls a shipped device, deletes all resources and references for this device, and then deletes the device.

Execute recall-device RPC

```
POST /tssm/recall-device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		recall-device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	recall-device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/recall-device"
```

Request body

```
{
  "input" : {
    "device" : {
      "fqname" : "string",
      "uuid" : "string",
      "force_delete" : true
    },
    "url" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Remove-site

RPC to remove site.

Execute remove-site RPC

```
POST /tssm/remove-site
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		remove-site-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	remove-site-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/remove-site"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "tenant_name" : "string",
    "remove_tenant" : true,
    "forced" : true,
    "sites" : [ {
      "site_name" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Resource-pool

List of resource pools.

[Add a new resource-pool](#)

POST /tssm/resource-pool

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		resource-pool{id}	

Responses

HTTP Code	Description	Schema
200	Successful operation	resource-pool{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

"/tssm/resource-pool"

Request body

```

{
  "nfv_resource_pool_id" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}

```

Example HTTP response

Response 200

```
{
  "nfv_resource_pool_id" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Get the resource-pool list

```
GET /tssm/resource-pool
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< resource-pool > array

Example HTTP request

Request path

```
"/tssm/resource-pool"
```

Example HTTP response

Response 200

```
"array"
```

Get a single resource-pool

```
GET /tssm/resource-pool/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	resource-pool{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/resource-pool/0"
```

Example HTTP response

Response 200


```
{
  "nfv_resource_pool_id" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Update resource-pool information

```
PUT /tssm/resource-pool/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	resource-pool{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/resource-pool/0"
```

Example HTTP response

Response 200

```
{
  "nfv_resource_pool_id" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string"
}
```

Delete a single resource-pool

```
DELETE /tssm/resource-pool/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/resource-pool/0"
```

Ship-device

Add shipped device to a site. Device has not been activated yet.

Execute ship-device RPC

```
POST /tssm/ship-device
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		ship-device-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	ship-device-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/ship-device"
```

Request body

```
{
  "input" : {
    "job_name_prefix" : "string",
    "shipped_device" : [ {
      "customer_name" : "string",
      "site_name" : "string",
      "serial_number" : "string",
      "activation_code" : "string",
      "device_name" : "string",
      "boot_image" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "jobid" : "string",
    "job_id" : "string",
    "status" : "string",
    "reason" : "string"
  }
}
```

Site

The site where the service to be delivered.

Add a new site

```
POST /tssm/site
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		<code>site{id}</code>	

Responses

HTTP Code	Description	Schema
200	Successful operation	<code>site{id}</code>
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
409	Conflict at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/site"
```

Request body

```
{
  "pnfid" : 0,
  "ipam_scope" : {
    "oam_pool" : {
      "scope_id" : "string",
      "ip_prefix" : "string",
      "default_gw" : "string",
      "ipam_pool_id" : "string",
      "ipam_chunkid" : "string"
    },
    "ip_pool" : {
      "scope_id" : "string",
      "ip_prefix" : "string",
      "default_gw" : "string",
      "ipam_pool_id" : "string",
      "ipam_chunkid" : "string"
    }
  }
}
```

```

    }
  },
  "site_type" : { },
  "topology_site_id" : { },
  "device_template_id" : { },
  "properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "state" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    },
    "uuid" : {
      "uuid_mslong" : 0,
      "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "pop" : [ null ],
  "resource-pool" : [ null ]
}

```

Example HTTP response

Response 200

```

{
  "pnfid" : 0,
  "ipam_scope" : {
    "oam_pool" : {
      "scope_id" : "string",
      "ip_prefix" : "string",
      "default_gw" : "string",
      "ipam_pool_id" : "string",
      "ipam_chunkid" : "string"
    },
    "ip_pool" : {
      "scope_id" : "string",
      "ip_prefix" : "string",
      "default_gw" : "string",
      "ipam_pool_id" : "string",
      "ipam_chunkid" : "string"
    }
  },
  "site_type" : { },
  "topology_site_id" : { },
  "device_template_id" : { },
  "properties" : {
    "property" : {
      "name" : "string"
    }
  },
  "user_defined_properties" : {
    "name" : "string",
    "value" : "string"
  },
  "state" : { },
  "id-perms" : {
    "permissions" : {
      "owner" : "string",
      "owner_access" : 0,
      "group" : "string",
      "group_access" : 0,
      "other_access" : 0
    }
  },
  "uuid" : {
    "uuid_mslong" : 0,
    "uuid_lslong" : 0
  },

```



```
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
  },
  "perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
      "tenant" : "string",
      "tenant_access" : 0
    } ]
  },
  "display-name" : "string",
  "pop" : [ null ],
  "resource-pool" : [ null ]
}
```

Get the site list

```
GET /tssm/site
```

Responses

HTTP Code	Description	Schema
200	Successful operation	< site > array

Example HTTP request

Request path

```
"/tssm/site"
```

Example HTTP response

Response 200

```
"array"
```

Get a single site

```
GET /tssm/site/{id0}
```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	site{id}
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/site/0"
```

Example HTTP response

Response 200

```
{
  "pnfid" : 0,
  "ipam_scope" : {
    "oam_pool" : {
      "scope_id" : "string",
      "ip_prefix" : "string",
      "default_gw" : "string",
      "ipam_pool_id" : "string",
      "ipam_chunkid" : "string"
    },
    "ip_pool" : {
      "scope_id" : "string",
      "ip_prefix" : "string",
      "default_gw" : "string",
```

```

        "ipam_pool_id" : "string",
        "ipam_chunkid" : "string"
    }
},
"site_type" : { },
"topology_site_id" : { },
"device_template_id" : { },
"properties" : {
    "property" : {
        "name" : "string"
    }
},
"user_defined_properties" : {
    "name" : "string",
    "value" : "string"
},
"state" : { },
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    } ]
},
"display-name" : "string",
"pop" : [ null ],
"resource-pool" : [ null ]

```

```
}

```

Update site information

```
PUT /tssm/site/{id0}

```

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	site{id}
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/site/0"

```

Example HTTP response

Response 200

```
{
  "pnfid" : 0,
  "ipam_scope" : {
    "oam_pool" : {
      "scope_id" : "string",
      "ip_prefix" : "string",
      "default_gw" : "string",
      "ipam_pool_id" : "string",
      "ipam_chunkid" : "string"
    }
  }
}

```

```

    },
    "ip_pool" : {
        "scope_id" : "string",
        "ip_prefix" : "string",
        "default_gw" : "string",
        "ipam_pool_id" : "string",
        "ipam_chunkid" : "string"
    }
},
"site_type" : { },
"topology_site_id" : { },
"device_template_id" : { },
"properties" : {
    "property" : {
        "name" : "string"
    }
},
},
"user_defined_properties" : {
    "name" : "string",
    "value" : "string"
},
"state" : { },
"id-perms" : {
    "permissions" : {
        "owner" : "string",
        "owner_access" : 0,
        "group" : "string",
        "group_access" : 0,
        "other_access" : 0
    },
    "uuid" : {
        "uuid_mslong" : 0,
        "uuid_lslong" : 0
    },
    "enable" : true,
    "description" : "string",
    "user-visible" : true,
    "creator" : "string",
    "modifier" : "string"
},
"perms2" : {
    "owner" : "string",
    "owner-access" : 0,
    "global-access" : 0,
    "share" : [ {
        "tenant" : "string",
        "tenant_access" : 0
    }

```

```
} ]  
},  
"display-name" : "string",  
"pop" : [ null ],  
"resource-pool" : [ null ]  
}
```

Delete a single site

DELETE /tssm/site/{id0}

Parameters

Type	Name	Description	Schema	Default
Path	id0 <i>required</i>		integer(int64)	

Responses

HTTP Code	Description	Schema
200	Successful operation	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

`"/tssm/site/0"`

Site-activate

Activate a site.

Execute site-activate RPC

POST /tssm/site-activate

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		site-activate-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	site-activate-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/site-activate"
```

Request body

```
{
  "input" : {
    "site" : [ {
      "site_uuid" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job" : [ {
      "jobid" : "string",
      "job_id" : "string"
    } ]
  }
}
```

Site-deactivate

Deactivate a site.

Execute site-deactivate RPC

```
POST /tssm/site-deactivate
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		site-deactivate-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	site-deactivate-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/site-deactivate"
```


Request body

```
{
  "input" : {
    "site" : [ {
      "site_uuid" : "string"
    } ]
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job" : [ {
      "jobid" : "string",
      "job_id" : "string"
    } ]
  }
}
```

Start-device-activation

Start device activation.

Execute start-device-activation RPC

```
POST /tssm/start-device-activation
```

Parameters

Type	Name	Description	Schema	Default
Body	input <i>optional</i>		start-device-activation-input	

Responses

HTTP Code	Description	Schema
200	Successful operation	start-device-activation-output
400	Invalid input supplied	No Content
401	Unauthorized at auth backend	No Content
403	Forbidden in auth backend	No Content

HTTP Code	Description	Schema
404	Not found	No Content
405	Method not allowed at auth backend	No Content
412	Service request failed	No Content
500	Internal server error	No Content
503	Service unavailable	No Content

Example HTTP request

Request path

```
"/tssm/start-device-activation"
```

Request body

```
{
  "input" : {
    "device_uuid" : "string",
    "prev_job_id" : "string"
  }
}
```

Example HTTP response

Response 200

```
{
  "output" : {
    "job_id" : "string",
    "reason" : "string"
  }
}
```

9.15.3. Definitions

AccessInfoOamTrafficType

Name	Description	Schema
gateway_ip <i>optional</i>	OAM traffic gateway ip address. Example : "string"	string
ip_prefix <i>optional</i>	IP prefix assigned to site management network. Example : "string"	string

AccessInfoWanTrafficType

Name	Description	Schema
ipsec_info <i>optional</i>	Example : " WanTrafficIpssecInfoType "	WanTrafficIpssecInfoType
local_interface <i>optional</i>	Name of the local interface name for this WAN link. Required value for overlay tunnel. The value must be different for each WAN link, where ipsec concentrator device provided. Default : "ge-0/0/3" Example : " string "	string
local_ip_prefix <i>optional</i>	Local IP prefix of the WAN link. If ipsec is enabled, this IP is the local tunnel interface IP prefix. Example : " string "	string
remote_ip_prefix <i>optional</i>	Remote IP prefix of the WAN link. If ipsec is enabled, this IP is the remote tunnel interface IP prefix. Example : " string "	string
tunnel_type <i>optional</i>	WAN link type. Example : " string "	enum (IPSEC, GRE, GRE_IPSEC)
vrf_name <i>optional</i>	Data access link VRF name. Example : " string "	string
wan_link_name <i>optional</i>	WAN link names with max 4 WAN links supported per site. Example : " string "	enum (WAN_0, WAN_1, WAN_2, WAN_3)
wan_link_type <i>optional</i>	WAN link type. Example : " string "	enum (MPLS, Internet)

AclEntriesType

Name	Description	Schema
acl-rule <i>optional</i>	Example : [" AclRuleType "]	< AclRuleType > array
dynamic <i>optional</i>	Example : true	boolean

AclRuleType

Name	Description	Schema
action_list <i>optional</i>	Example : " string "	string
match_condition <i>optional</i>	Example : " string "	string
rule_uuid <i>optional</i>	Example : " string "	string

AddDeleteLanSegmentsInputDevicesType

Name	Description	Schema
delete_lan_segments_list <i>optional</i>	LAN segments to be deleted. Example : " string "	string

Name	Description	Schema
device_name <i>optional</i>	Device name Example : "string"	string
lan_segment <i>optional</i>	Example : "LanSegmentGroupType"	LanSegmentGroupType

AddDeleteLanSegments_InputType

Name	Description	Schema
devices <i>optional</i>	Example : ["AddDeleteLanSegmentsInputDevicesType"]	< AddDeleteLanSegments InputDevicesType > array
tenant_name <i>optional</i>	Name of tenant. Example : "string"	string

AddDeleteLanSegments_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

AddDepartmentToSite_InputType

Name	Description	Schema
departments <i>optional</i>	The department/LAN segment configuration on each device. Example : "string"	string
sites <i>optional</i>	List of sites where LAN configuration needs to be applied. Example : "string"	string
tenant_name <i>optional</i>	Name of tenant. Example : "string"	string

AddDepartmentToSite_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

AddDepartmentToVpnInputDepartmentListType

Name	Description	Schema
department_name <i>optional</i>	Name of department to add. Example : "string"	string
site_list <i>optional</i>	Example : "DepartmentListSiteListType"	DepartmentListSiteListType
vpn_name <i>optional</i>	VPN to which department is added. Example : "string"	string

AddDepartmentToVpn_InputType

Name	Description	Schema
department_list <i>optional</i>	Example : ["AddDepartmentToVpnInputDepartmentListType"]	< AddDepartmentToVpnInputDepartmentListType > array
tenant_name <i>optional</i>	Tenant context in which the department should be added to site. Example : "string"	string

AddDepartmentToVpn_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Default : "active" Example : "string"	enum (success, in-progress, failed)

AddSiteToVpnInputOverlayTunnelInfoType

Name	Description	Schema
peer_info <i>optional</i>	Example : "OverlayTunnelInfoPeerInfoType"	OverlayTunnelInfoPeerInfoType
tunnel_destination_ip <i>optional</i>	Tunnel destination IP address. Example : "string"	string
tunnel_endpoint_role <i>optional</i>	End point role. Example : "string"	enum (HUB, SPOKE)
tunnel_source_ip <i>optional</i>	Tunnel source IP address. Example : "string"	string
tunnel_type <i>optional</i>	WAN link type. Example : "string"	enum (IPSEC, GRE, GRE_IPSEC)

Name	Description	Schema
vrf_name <i>optional</i>	Data access link VRF name. Example : "string"	string

AddSiteToVpnInputWanLinkInfoType

Name	Description	Schema
address_assignment <i>optional</i>	Address type. Example : "string"	enum (DHCP, STATIC)
local_interface <i>optional</i>	Name of the local interface on the CPE device. Default : "ge-0/0/3" Example : "string"	string
peer_as_number <i>optional</i>	BGP as number on router. Saved as router_as_number in topology site properties. Example : "string"	string
peer_ip_address <i>optional</i>	Router ip address. Example : "string"	string
peer_router_name <i>optional</i>	Router name. Example : "string"	string
static_ip_assignment <i>optional</i>	Example : "WanLinkInfoStaticIpAssignmentType"	WanLinkInfoStaticIpAssignmentType
traffic_type <i>optional</i>	Traffic type. Example : "string"	enum (OAM_ONLY, DATA_ONLY, OAM_AND_DATA)
wan_link_name <i>optional</i>	WAN link names with max 4 WAN links supported per site. Example : "string"	enum (WAN_0, WAN_1, WAN_2, WAN_3)
wan_link_type <i>optional</i>	WAN link type. Example : "string"	enum (MPLS, Internet)

AddSiteToVpn_InputType

Name	Description	Schema
device_id <i>optional</i>	Topo device id. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
job_name_prefix <i>optional</i>	A descriptive job name prefix, less than 16 characters. Example : "string"	string
overlay_tunnel_info <i>optional</i>	Example : ["AddSiteToVpnInputOverlayTunnelInfoType"]	< AddSiteToVpnInputOverlayTunnelInfoType > array

Name	Description	Schema
site_uuid <i>optional</i>	Topology site id. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
vpn_uuid <i>optional</i>	Topology VPN UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
wan_link_info <i>optional</i>	Example : "AddSiteToVpnInputWanLinkInfoType"	AddSiteToVpnInputWanLinkInfoType
wan_link_name <i>optional</i>	Example : "string"	enum (WAN_0, WAN_1, WAN_2, WAN_3)

[AddSiteToVpn_OutputType](#)

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

[CloudInternetNetworkType](#)

Name	Description	Schema
onboard <i>optional</i>	True: import named virtual network object from VIM; false: create a virtual network in VIM with the specified name. In both cases link VIM object to entry in local database object with the same name. Example : true	boolean
route_target <i>optional</i>	List of Internet route targets. Example : "string"	string
subnet <i>optional</i>	List of Internet subnet IP addresses. Example : "string"	string
vl_name <i>optional</i>	Name of virtual network to create. Example : "string"	string
vld_name <i>optional</i>	VLD name in NSD. Example : "string"	string

[CloudMgmtNetworkType](#)

Name	Description	Schema
onboard <i>optional</i>	True: import named virtual network object from VIM; false: create a virtual network in VIM with the specified name. In both cases link VIM object to entry in local database object with the same name Example : <code>true</code>	boolean
route_target <i>optional</i>	List of route targets of mgmt net. Example : <code>"string"</code>	string
subnet <i>optional</i>	List of subnet IP address of mgmt net. Example : <code>"string"</code>	string
vl_name <i>optional</i>	The name of virtual network to create. Example : <code>"string"</code>	string
vld_name <i>optional</i>	VLD name in NSD. Example : <code>"string"</code>	string

CloudResourcePoolType

Name	Description	Schema
compute_zone <i>optional</i>	The corresponding availability zone name in Contrail VIM. Example : <code>"string"</code>	string
name <i>optional</i>	Resource pool name in CSP VIM service. Example : <code>"string"</code>	enum (config, monitor)

CloudSiteInfoInternetInfoType

Name	Description	Schema
virtual_network_name <i>optional</i>	Name of the pre-existing virtual network to be used. The network must exist under the assigned _vim specified in the payload. Example : <code>"string"</code>	string

CloudVimServiceProfilesType

Name	Description	Schema
default_service_profile_name <i>optional</i>	Name of default service profile. Optional. Example : <code>"string"</code>	string
service_profiles <i>optional</i>	Example : <code>"VimServiceProfilesServiceProfilesType"</code>	VimServiceProfilesServiceProfilesType

ConfigInputPnfConfigPnfTransportSshOptionsCredentialType

Name	Description	Schema
password <i>optional</i>	Example : <code>"string"</code>	string
username <i>optional</i>	Example : <code>"string"</code>	string

ConfigInputPnfConfigPnfTransportSshOptionsType

Name	Description	Schema
auth_key <i>optional</i>	Example : <code>"string"</code>	string
credential <i>optional</i>	Example : <code>"ConfigInputPnfConfigPnfTransportSshOptionsCredentialType"</code>	ConfigInputPnfConfigPnfTransportSshOptionsCredentialType

ConfigInputPnfConfigPnfTransportType

Name	Description	Schema
ssh_options <i>optional</i>	Example : <code>"ConfigInputPnfConfigPnfTransportSshOptionsType"</code>	ConfigInputPnfConfigPnfTransportSshOptionsType

ConfigInputPnfConfigType

Name	Description	Schema
component_name <i>optional</i>	Example : <code>"string"</code>	string
function_config <i>optional</i>	Example : <code>"PnfConfigFunctionConfigType"</code>	PnfConfigFunctionConfigType
pnf_address <i>optional</i>	Example : <code>"string"</code>	string
pnf_device <i>optional</i>	Example : <code>"string"</code>	string
pnf_transport <i>optional</i>	Example : <code>"ConfigInputPnfConfigPnfTransportType"</code>	ConfigInputPnfConfigPnfTransportType
pnfid <i>optional</i>	PNF uuid. Example : <code>"string"</code>	string
region <i>optional</i>	Example : <code>"string"</code>	string

ConfigInputVnfConfigType

Name	Description	Schema
function_config <i>optional</i>	Example : <code>"VnfConfigFunctionConfigType"</code>	VnfConfigFunctionConfigType
vnfid <i>optional</i>	VNF UUID. Example : <code>"string"</code>	string

ConfigureSitesInputSiteCloudHubSiteInfoType

Name	Description	Schema
hub_device <i>optional</i>	Name of the hub device in the POP that will be used for this cloud SDWAN hub site. Example : <code>"string"</code>	string
pop <i>optional</i>	Name of the POP managing this site. Example : <code>"string"</code>	string
vrf_name <i>optional</i>	This is to support xCPE use case where we need to specify the VRF peered with Contrail for steering traffic to the service chain running in the Contrail cloud. Example : <code>"string"</code>	string
wan_links <i>optional</i>	List of WAN links that this tenant cloud hub site is assigned or authorized to use. When the hub device has multiple WAN links, this allows SP admins to assign specific WAN links to specific tenant cloud hub sites. Example : <code>"string"</code>	string

ConfigureSitesInputSiteCloudSiteInfoPopInfoType

Name	Description	Schema
left_virtual_n etworks <i>optional</i>	Example : <code>"PopInfoLeftVirtualNetworksType"</code>	PopInfoLeftVirtualNetworksType
pop_name <i>optional</i>	Name of POP managing the site. Example : <code>"string"</code>	string
route_target <i>optional</i>	Route target of the left network. Example : <code>"string"</code>	string

ConfigureSitesInputSiteCloudSiteInfoRouterInfoType

Name	Description	Schema
left_virtual_n etworks <i>optional</i>	Example : <code>"RouterInfoLeftVirtualNetworksType"</code>	RouterInfoLeftVirtualNetworksType
route_target <i>optional</i>	Route target of the left network. Example : <code>"string"</code>	string
router_name <i>optional</i>	Router name. Example : <code>"string"</code>	string
vrf_name <i>optional</i>	Virtual router function name. Example : <code>"string"</code>	string

ConfigureSitesInputSiteCloudSiteInfoType

Name	Description	Schema
assigned_resource_pool <i>optional</i>	Name of the assigned resource pool in NSO. Saved as respool_id in topology site properties. Example : <code>"string"</code>	string
assigned_vim <i>optional</i>	Optional, name of assigned VIM in NSO. If not specified, the first assigned_resource_pool name is used. Example : <code>"string"</code>	string

Name	Description	Schema
internet_info <i>optional</i>	Example : <code>"CloudSiteInfoInternetInfoType"</code>	CloudSiteInfoInternetInfoType
pop_info <i>optional</i>	Example : <code>"ConfigureSitesInputSiteCloudSiteInfoPopInfoType"</code>	ConfigureSitesInputSiteCloudSiteInfoPopInfoType
router_info <i>optional</i>	Example : <code>"ConfigureSitesInputSiteCloudSiteInfoRouterInfoType"</code>	ConfigureSitesInputSiteCloudSiteInfoRouterInfoType

[ConfigureSitesInputSiteDataCenterSiteInfoType](#)

Name	Description	Schema
assigned_resource_pool <i>optional</i>	Name of the assigned resource pool name in NSO for this site. Saved as resource pool id in topology site properties. Example : <code>"string"</code>	string
assigned_vim <i>optional</i>	Optional; name of assigned VIM in NSO. If not specified, the first VIM of the POP will be selected. Example : <code>"string"</code>	string
internet_info <i>optional</i>	Example : <code>"DataCenterSiteInfoInternetInfoType"</code>	DataCenterSiteInfoInternetInfoType
onboard <i>optional</i>	When set to true, imports named virtual network object from VIM; if false: creates a virtual network in VIM with the specified name. In both cases, link the VIM object to the entry with the same name within the local database object. Example : <code>true</code>	boolean
pop_name <i>optional</i>	Name of the POP managing the site. Example : <code>"string"</code>	string
route_target <i>optional</i>	Route target for corporate data center network. New Vlink with route-target and subnet is created and saved as corp_transit_net_id in topology site properties. Example : <code>"string"</code>	string
subnet <i>optional</i>	Subnet of corporate data center network. Example : <code>"string"</code>	string
vl_name <i>optional</i>	Name of the virtual link. Example : <code>"string"</code>	string

[ConfigureSitesInputSiteHybridWanSiteInfoType](#)

Name	Description	Schema
access_info <i>optional</i>	Example : <code>"HybridWanSiteInfoAccessInfoType"</code>	HybridWanSiteInfoAccessInfoType
cpe_as_number <i>optional</i>	BGP as number on device. Saved as cpe_as_number in topology site properties. Example : <code>"string"</code>	string
device_details <i>optional</i>	Example : <code>"HybridWanSiteInfoDeviceDetailsType"</code>	HybridWanSiteInfoDeviceDetailsType
device_name <i>optional</i>	Name of the device Example : <code>"string"</code>	string

Name	Description	Schema
device_template_name <i>optional</i>	Device Template Name to control device configuration per site Example : <code>"string"</code>	string

ConfigureSitesInputSiteOnPremiseSiteInfoType

Name	Description	Schema
device <i>optional</i>	Example : <code>"OnPremiseSiteInfoDeviceType"</code>	OnPremiseSiteInfoDeviceType
ha_info <i>optional</i>	Example : <code>"OnPremiseSiteInfoHaInfoType"</code>	OnPremiseSiteInfoHaInfoType
hashtag <i>optional</i>	Common hash tag. Example : <code>"string"</code>	string
hub_site <i>optional</i>	Name of the hub site to which spoke site connects. Optional parameter, needed only for spoke sites. Example : <code>"string"</code>	string
pop <i>optional</i>	Name of POP managing this site. Example : <code>"string"</code>	string
region <i>optional</i>	CSO region that manages this site. Example : <code>"string"</code>	string
site_group <i>optional</i>	Site group ID. Example : <code>"string"</code>	string
site_role <i>optional</i>	Site role. Example : <code>"string"</code>	enum (HUB, SPOKE, NONE, BOTH)
site_template <i>optional</i>	Site template UUID. Example : <code>"string"</code>	string

ConfigureSitesInputSiteType

Name	Description	Schema
cloud_hub_site_info <i>optional</i>	Example : <code>"ConfigureSitesInputSiteCloudHubSiteInfoType"</code>	ConfigureSitesInputSiteCloudHubSiteInfoType
cloud_site_info <i>optional</i>	Example : <code>"ConfigureSitesInputSiteCloudSiteInfoType"</code>	ConfigureSitesInputSiteCloudSiteInfoType
data_center_site_info <i>optional</i>	Example : <code>"ConfigureSitesInputSiteDataCenterSiteInfoType"</code>	ConfigureSitesInputSiteDataCenterSiteInfoType
hybrid_wan_site_info <i>optional</i>	Example : <code>"ConfigureSitesInputSiteHybridWanSiteInfoType"</code>	ConfigureSitesInputSiteHybridWanSiteInfoType
on_premise_site_info <i>optional</i>	Example : <code>"ConfigureSitesInputSiteOnPremiseSiteInfoType"</code>	ConfigureSitesInputSiteOnPremiseSiteInfoType
properties <i>optional</i>	Example : <code>"SitePropertiesType"</code>	SitePropertiesType

Name	Description	Schema
site_basic_properties <i>optional</i>	Example : "SiteSiteBasicPropertiesType"	SiteSiteBasicPropertiesType
site_name <i>optional</i>	Site name. Example : "string"	string
user_defined_properties <i>optional</i>	Example : "SiteUserDefinedPropertiesType"	SiteUserDefinedPropertiesType

ConfigureSites_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	A descriptive job name prefix, less than 16 characters. Example : "string"	string
site <i>required</i>	Example : ["ConfigureSitesInputSiteType"]	< ConfigureSitesInputSiteType > array
tenant_name <i>optional</i>	Tenant name for the sites to be created. Example : "string"	string

ConfigureSites_OutputType

Name	Description	Schema
job_id <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Default : "active" Example : "string"	enum (success, in-progress, failed)

CreateSitesInputSiteType

Name	Description	Schema
site_basic_properties <i>optional</i>	Example : "SiteSiteBasicPropertiesType"	SiteSiteBasicPropertiesType
site_name <i>optional</i>	Name of the site to be created in Topology service and Tssm. Supports max of 15 characters only letters and digits are allowed. Example : "string"	string

CreateSites_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	A descriptive job name prefix, less than 16 characters. Example : "string"	string

Name	Description	Schema
site <i>optional</i>	Example : ["CreateSitesInputSiteType"]	< CreateSitesInputSiteType > array
tenant_name <i>optional</i>	Tenant name for the sites to be created. Example : "string"	string

CreateSites_OutputType

Name	Description	Schema
job_id <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

CustomerDefaultSslProxyProfileType

Name	Description	Schema
enabled <i>optional</i>	If set to True, Default SSL FP will be generated for the tenant. In case of enabled, root CA must be provided and default_root_certificate becomes mandatory. Example : true	boolean

CustomerDeploymentScenarioType

Deployment scenario.

Type : enum (managed_wan, flex_wan, managed_wan_v2)

CustomerNetworksType

Name	Description	Schema
network <i>optional</i>	Example : ["NetworksNetworkType"]	< NetworksNetworkType > array

CustomerPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesType"]	< PropertiesType > array

CustomerServicePropertiesType

Name	Description	Schema
name <i>required</i>	Property name. Example : "string"	string

Name	Description	Schema
value <i>optional</i>	Property value in JSON string. Example : <code>"string"</code>	string

CustomerTenantExistedType

Value existed if tenant pre-existed in keystone. Delete customer will not try to delete that tenant from keystone.

Type : enum (existed, created)

CustomerTenantTypeType

Tenant type: default, small, medium, large or xlarge.

Type : enum (default, small, medium, large, xlarge)

CustomerUiLayoutType

Name	Description	Schema
id <i>required</i>	Id of the UI layout. Example : <code>"string"</code>	string
name <i>optional</i>	UI layout name. Example : <code>"string"</code>	enum (config, monitor)
topo_data <i>optional</i>	Blob field for keeping topology information. Example : <code>"string"</code>	string

CustomerUserDefinedPropertiesType

Name	Description	Schema
name <i>required</i>	Property name. Example : <code>"string"</code>	string
value <i>optional</i>	Property value in JSON string. Example : <code>"string"</code>	string

CustomerVimServiceProfilesType

Name	Description	Schema
profile_name <i>optional</i>	Profile name from VIM service (containing infra tenant information) associated with that csp tenant. Example : <code>"string"</code>	string
vim_name <i>required</i>	VIM name from VIM service. Example : <code>"string"</code>	string

CustomizedModelPnfConfigType

Name	Description	Schema
function_config <i>optional</i>	Example : <code>"PnfConfigFunctionConfigType"</code>	PnfConfigFunctionConfigType
pnfid <i>optional</i>	PNF UUID. Example : <code>"string"</code>	string

CustomizedModelVnfConfigType

Name	Description	Schema
function_config <i>optional</i>	Example : "VnfConfigFunctionConfigType"	VnfConfigFunctionConfigType
managed_by_ipm <i>optional</i>	Indicate if the config is managed by IPM service. Example : true	boolean
vnfid <i>optional</i>	VNF UUID. Example : "string"	string

CustomizedModelsCustomizedModelType

Name	Description	Schema
app_point <i>optional</i>	Type of application point. Example : "string"	enum (site-vpn, site-internet, customer-internet, ucpe)
ccpe_service_config_variables <i>optional</i>	YANG model of CCPE service input variables. Example : "string"	string
pnf_config <i>optional</i>	Example : "CustomizedModelPnfConfigType"	CustomizedModelPnfConfigType
vnf_config <i>optional</i>	Example : "CustomizedModelVnfConfigType"	CustomizedModelVnfConfigType

DataCenterSiteInfoInternetInfoType

Name	Description	Schema
virtual_network_name <i>optional</i>	Name of the pre-existing virtual network to be used. The network must exist under the assigned_vim specified in the payload. Example : "string"	string

DeleteDepartmentFromSite_InputType

Name	Description	Schema
departments <i>optional</i>	The department/LAN segment configuration on each device. Example : "string"	string
sites <i>optional</i>	List of sites to which to apply LAN configuration. Example : "string"	string
tenant_name <i>optional</i>	Tenant name. Example : "string"	string

DeleteDepartmentFromSite_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

Name	Description	Schema
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

DeleteDepartmentFromVpnInputDepartmentListType

Name	Description	Schema
department_name <i>optional</i>	Name of department to be deleted. Example : "string"	string
site_list <i>optional</i>	Example : "DepartmentListSiteListType"	DepartmentListSiteListType
vpn_name <i>optional</i>	VPN name. Example : "string"	string

DeleteDepartmentFromVpn_InputType

Name	Description	Schema
department_list <i>optional</i>	Example : ["DeleteDepartmentFromVpnInputDepartmentListType"]	< DeleteDepartmentFromVpnInputDepartmentListType > array
tenant_name <i>optional</i>	Tenant context in which the department should be added to site. Example : "string"	string

DeleteDepartmentFromVpn_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

DeleteSiteFromVpn_InputType

Name	Description	Schema
device_id <i>optional</i>	Topo device ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

Name	Description	Schema
job_name_prefix <i>optional</i>	A descriptive job name prefix, less than 16 characters. Example : "string"	string
site_uuid <i>optional</i>	Topology site ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
vpn_uuid <i>optional</i>	Topology VPN UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

DeleteSiteFromVpn_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

DepartmentListSiteListType

Name	Description	Schema
device_list <i>optional</i>	List of associated device names. Example : "string"	string
site_name <i>optional</i>	Site name. Example : "string"	string

DeviceAuthenticationKeyBasedType

Name	Description	Schema
auth_key <i>optional</i>	Authentication key for device. Example : "string"	string

DeviceAuthenticationPasswordBasedType

Name	Description	Schema
password <i>optional</i>	Password for device. Example : "string"	string
username <i>optional</i>	User name for device. Example : "string"	string

DeviceAuthenticationType

Name	Description	Schema
key_based <i>optional</i>	Example : "DeviceAuthenticationKeyBasedType"	DeviceAuthenticationKeyBasedType
password_based <i>optional</i>	Example : "DeviceAuthenticationPasswordBasedType"	DeviceAuthenticationPasswordBasedType

DeviceDeviceDetailsType

Name	Description	Schema
activation_code <i>optional</i>	Activation code of the shipped device. Example : "string"	string
boot_image <i>optional</i>	Optional boot image canonical name for the device image that was previously uploaded to the image service. This image will be used to upgrade the device after it calls home. If not provided, the device will skip auto upgrade. NOTE: the boot image MUST be uploaded to image service so that this canonical name is known when this API is invoked. Example : "string"	string
serial_number <i>optional</i>	Serial Number of the shipped device. Example : "string"	string

DeviceLanSegmentType

Name	Description	Schema
department <i>optional</i>	Department name. Default : "Default" Example : "string"	string
dhcp <i>optional</i>	If set to true, enable DHCP. Example : true	boolean
ip_prefix <i>optional</i>	IP address prefix. Example : "string"	string
lan_ports <i>optional</i>	List of LAN ports. Example : "string"	string
lan_segment_name <i>optional</i>	LAN segment name. Example : "string"	string

DeviceOamTrafficType

Name	Description	Schema
gateway_ip <i>optional</i>	OAM traffic gateway IP address. Example : "string"	string
ip_prefix <i>optional</i>	IP prefix assigned to site management network. Example : "string"	string

DevicePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : "PropertiesType"	PropertiesType

DeviceTemplateLanSegmentType

Name	Description	Schema
department <i>optional</i>	Department name. Default : "Default" Example : "string"	string
dhcp <i>optional</i>	If set to true, enable DHCP. Example : true	boolean
ip_prefix <i>optional</i>	IP address prefix. Example : "string"	string
lan_ports <i>optional</i>	List of LAN ports. Example : "string"	string
lan_segment_name <i>optional</i>	LAN segment name. Example : "string"	string

DeviceTemplateWanLinkInfoType

Name	Description	Schema
cost <i>optional</i>	Monthly cost for the WAN link. Example : 0	integer(int32)
cost_currency <i>optional</i>	Cost currency. Example : "string"	enum (USD, EUR, GBP, INR, AUD, CAD, SGD, CHF, MYR, JPY, CNY)
provider <i>optional</i>	Service provider name for the WAN link. Example : "string"	string
subscribed_bandwidth <i>optional</i>	Subscribed bandwidth for the WAN link. Example : 0	integer(int32)
wan_link <i>optional</i>	WAN link name Example : "string"	string
wan_link_type <i>optional</i>	WAN link type. Example : "string"	enum (MPLS, Internet)

DeviceWanLinkType

Name	Description	Schema
address_assignment <i>optional</i>	Address type. Example : "string"	enum (DHCP, STATIC)
local_interface <i>optional</i>	Name of the local interface on the CPE device. Default : "ge-0/0/3" Example : "string"	string
overlay_tunnel <i>optional</i>	Example : "WanLinkOverlayTunnelType"	WanLinkOverlayTunnelType

Name	Description	Schema
peer_as_number <i>optional</i>	BGP as number on router. Saved as router_as_number in topology site properties. Example : "string"	string
peer_ip_address <i>optional</i>	Router ip address. Example : "string"	string
peer_router_name <i>optional</i>	Router name. Example : "string"	string
static_ip_assignment <i>optional</i>	Example : "WanLinkStaticIpAssignmentType"	WanLinkStaticIpAssignmentType
traffic_type <i>optional</i>	Traffic type. Example : "string"	enum (OAM_ONLY, DATA_ONLY, OAM_AND_DATA)
wan_link_name <i>optional</i>	WAN link names with max 4 WAN links supported per site. Example : "string"	enum (WAN_0, WAN_1, WAN_2, WAN_3)
wan_link_type <i>optional</i>	WAN link type. Example : "string"	enum (MPLS, Internet)

DomainLimitsType

Name	Description	Schema
project-limit <i>optional</i>	Example : 0	integer(int32)
security-group-limit <i>optional</i>	Example : 0	integer(int32)
virtual-network-limit <i>optional</i>	Example : 0	integer(int32)

GetNsdPackageDetailsOutputNsdPackageType

Name	Description	Schema
uuid <i>optional</i>	NSD package UUID. Example : "string"	string

GetNsdPackageDetails_InputType

Name	Description	Schema
service_profile_id <i>required</i>	Service profile UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetNsdPackageDetails_OutputType

Name	Description	Schema
config-template <i>optional</i>	Example : "[_csp-tssm_getnsdpackagedetailsoutputconfigtemplatetype]"	GetNsdPackageDetailsOutputConfigTemplateType
nsd-package <i>optional</i>	Example : "GetNsdPackageDetailsOutputNsdPackageType"	GetNsdPackageDetailsOutputNsdPackageType
pnfd-packages <i>optional</i>	Example : "[_csp-tssm_getnsdpackagedetailsoutputpnfdpackagestype]"	GetNsdPackageDetailsOutputPnfdPackagesType
vlinkds <i>optional</i>	Example : "[_csp-tssm_getnsdpackagedetailsoutputvlinkdstype]"	GetNsdPackageDetailsOutputVlinkdsType
vnfd-packages <i>optional</i>	Example : "[_csp-tssm_getnsdpackagedetailsoutputvnfdpackagestype]"	GetNsdPackageDetailsOutputVnfdPackagesType

GetPnfAbstractConfigOutputTemplateConfigType

Name	Description	Schema
config_template <i>optional</i>	Configuration template UUID. Example : "string"	string

GetPnfAbstractConfig_InputType

Name	Description	Schema
config_template <i>optional</i>	Config template ID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
pnf_device_uuid <i>optional</i>	NSO PNF device uuid. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
site_id <i>optional</i>	Optional TSSM site UUID, used to identify a unique site-specific abstract config. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetPnfAbstractConfig_OutputType

Name	Description	Schema
template_config <i>optional</i>	Example : ["GetPnfAbstractConfigOutputTemplateConfigType"]	< GetPnfAbstractConfigOutputTemplateConfigType > array

GetServiceContextOutputPnfInfoType

Name	Description	Schema
pnf_uuid <i>optional</i>	PNF UUID. Example : <code>"string"</code>	string

GetServiceContextOutputServiceInfoType

Name	Description	Schema
service_fq_name <i>optional</i>	Service instance FQ name. Example : <code>"string"</code>	string
service_properties <i>optional</i>	Example : <code>"ServiceInfoServicePropertiesType"</code>	ServiceInfoServicePropertiesType
service_uuid <i>optional</i>	Service instance UUID. Example : <code>"string"</code>	string

GetServiceContextOutputSiteInfoType

Name	Description	Schema
site_fq_name <i>optional</i>	Site FQ name. Example : <code>"string"</code>	string
site_properties <i>optional</i>	Example : <code>"SiteInfoSitePropertiesType"</code>	SiteInfoSitePropertiesType
site_uuid <i>optional</i>	Site UUID. Example : <code>"string"</code>	string
user_defined_site_properties <i>optional</i>	Example : <code>"SiteInfoUserDefinedSitePropertiesType"</code>	SiteInfoUserDefinedSitePropertiesType

GetServiceContextOutputTenantInfoType

Name	Description	Schema
tenant_fq_name <i>optional</i>	Tenant FQ name. Example : <code>"string"</code>	string
tenant_properties <i>optional</i>	Example : <code>"TenantInfoTenantPropertiesType"</code>	TenantInfoTenantPropertiesType
tenant_uuid <i>optional</i>	Tenant UUID. Example : <code>"string"</code>	string
user_defined_tenant_properties <i>optional</i>	Example : <code>"TenantInfoUserDefinedTenantPropertiesType"</code>	TenantInfoUserDefinedTenantPropertiesType

GetServiceContext_InputType

Name	Description	Schema
service_instance_uuid <i>required</i>	Service instance UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetServiceContext_OutputType

Name	Description	Schema
pnf_info <i>optional</i>	Example : "GetServiceContextOutputPnfInfoType"	GetServiceContextOutputPnfInfoType
service_info <i>optional</i>	Example : "GetServiceContextOutputServiceInfoType"	GetServiceContextOutputServiceInfoType
site_info <i>optional</i>	Example : "GetServiceContextOutputSiteInfoType"	GetServiceContextOutputSiteInfoType
tenant_info <i>optional</i>	Example : "GetServiceContextOutputTenantInfoType"	GetServiceContextOutputTenantInfoType
user_name <i>optional</i>	User name from the token. Example : "string"	string

GetServiceInstanceDetailsOutputCustomerType

Name	Description	Schema
fq_name <i>optional</i>	TSSM customer fq name. Example : "string"	string
uuid <i>optional</i>	TSSM customer UUID. Example : "string"	string

GetServiceInstanceDetailsOutputSiteType

Name	Description	Schema
fq_name <i>optional</i>	TSSM site fq name. Example : "string"	string
uuid <i>optional</i>	TSSM site UUID. Example : "string"	string

GetServiceInstanceDetails_InputType

Name	Description	Schema
nfv_nsid <i>required</i>	NSO network service instance UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

GetServiceInstanceDetails_OutputType

Name	Description	Schema
customer <i>optional</i>	Example : "GetServiceInstanceDetailsOutputCustomerType"	GetServiceInstanceDetailsOutputCustomerType

Name	Description	Schema
site <i>optional</i>	Example : <code>"GetServiceInstanceDetailsOutputSiteType"</code>	GetServiceInstanceDetailsOutputSiteType

[GetServiceProfilesOutputServiceProfileType](#)

Name	Description	Schema
allowed_app_points <i>optional</i>	Applicable service application points. Example : <code>"string"</code>	enum (site-vpn, site-internet, customer-internet, ucpe)
functions <i>optional</i>	Functions implemented by the service (received from NSD package or manually entered for CCPE services). Example : <code>"string"</code>	string
id <i>optional</i>	Service profile UUID. Example : <code>"string"</code>	string
is_global <i>optional</i>	True if service profile is part of global service profile list. Example : <code>true</code>	boolean
target_type <i>optional</i>	target type Example : <code>"string"</code>	enum (ccpe, jsm)

[GetServiceProfiles_InputType](#)

Name	Description	Schema
customerid <i>required</i>	TSSM customer object UUID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

[GetServiceProfiles_OutputType](#)

Name	Description	Schema
service_profile <i>optional</i>	Example : <code>["GetServiceProfilesOutputServiceProfileType"]</code>	<code>< GetServiceProfilesOutputServiceProfileType ></code> array

[GetServicePropertiesOutputServicePropertiesType](#)

Name	Description	Schema
name <i>optional</i>	Property name. Example : <code>"string"</code>	enum (config, monitor)
value <i>optional</i>	Property value in JSON string. Example : <code>"string"</code>	string

[GetServiceProperties_InputType](#)

Name	Description	Schema
instance_uuid <i>required</i>	TSSM service instance UUID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

GetServiceProperties_OutputType

Name	Description	Schema
service_properties <i>optional</i>	Example : ["GetServicePropertiesOutputServicePropertiesType"]	< GetServicePropertiesOutputServicePropertiesType > array

GetSiteInfoOutputDeviceInfoType

Name	Description	Schema
device_id <i>optional</i>	UUID for the uCPE device. Example : "string"	string

GetSiteInfoOutputVnfInfoType

Name	Description	Schema
audit_logs <i>optional</i>	Example : "VnfInfoAuditLogsType"	VnfInfoAuditLogsType
current_state_transition <i>optional</i>	Example : "string"	enum (Instantiate, Terminate, Configure, Start, Stop, Scale-out, Scale-in, Reset, None)
ems_access_attributes <i>optional</i>	Example : "VnfInfoEmsAccessAttributesType"	VnfInfoEmsAccessAttributesType
family <i>optional</i>	Family Name copied from vlink descriptor Example : "string"	string
flavor_id <i>optional</i>	Flavour id Example : "string"	string
id <i>optional</i>	Two part id in format of <vnfd-id>_<ordinal>] defined in the NSD for each node Example : "string"	string
internal_info <i>optional</i>	Example : "VnfInfoInternalInfoType"	VnfInfoInternalInfoType
life_cycle_event_history <i>optional</i>	Example : "VnfInfoLifeCycleEventHistoryType"	VnfInfoLifeCycleEventHistoryType
monitoring_params <i>optional</i>	Example : "VnfInfoMonitoringParamsType"	VnfInfoMonitoringParamsType
name <i>optional</i>	Example : "string"	enum (config, monitor)
parent_ns <i>optional</i>	Example : "string"	string
scaling_policy_id <i>optional</i>	Example : "string"	string
selected_function_chain <i>optional</i>	Selected function chain name for this vnf Example : "string"	string

Name	Description	Schema
state <i>optional</i>	Example : <code>"string"</code>	enum (provisioned, activating, activated, deleted)
supported_function_chain <i>optional</i>	Example : <code>"string"</code>	string
vdus <i>optional</i>	Example : <code>"VnfInfoVdusType"</code>	VnfInfoVdusType
vnf_address <i>optional</i>	Example : <code>"VnfInfoVnfAddressType"</code>	VnfInfoVnfAddressType
vnf_connection_points <i>optional</i>	Example : <code>"VnfInfoVnfConnectionPointsType"</code>	VnfInfoVnfConnectionPointsType
vnf_id <i>optional</i>	UUID for the vnf-instance. Example : <code>"string"</code>	string
vnfd_id <i>optional</i>	UUID of the VNF Descriptor Example : <code>"string"</code>	string
vnfm_id <i>optional</i>	UUID of the VNF in the VNFM Example : <code>"string"</code>	string

[GetSiteInfo_InputType](#)

Name	Description	Schema
site_uuid <i>required</i>	Site UUID. Pattern : <code>"[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}"</code> Example : <code>"string"</code>	string

[GetSiteInfo_OutputType](#)

Name	Description	Schema
device_info <i>optional</i>	Example : <code>["GetSiteInfoOutputDeviceInfoType"]</code>	<code>< GetSiteInfoOutputDeviceInfoType ></code> array
site_type <i>optional</i>	Site deployment type. Example : <code>"string"</code>	enum (cloud, on_premise, data_center)
vnf_info <i>optional</i>	Example : <code>["GetSiteInfoOutputVnfInfoType"]</code>	<code>< GetSiteInfoOutputVnfInfoType ></code> array

[GetSupportedServicePropertiesOutputSupportedPropertiesType](#)

Name	Description	Schema
description <i>optional</i>	Detailed description of the property. Example : <code>"string"</code>	string
display_name <i>optional</i>	Display name of the property on UI. Example : <code>"string"</code>	string

Name	Description	Schema
name <i>optional</i>	Name of the property. Example : <code>"string"</code>	enum (config, monitor)
type <i>optional</i>	Data type of the property value. Example : <code>"string"</code>	enum (STR, NUM)

GetSupportedServiceProperties_InputType

Name	Description	Schema
instance_type <i>optional</i>	Pass the listed types to get its supported properties. Listed types : ns-instance. Example : <code>"string"</code>	string

GetSupportedServiceProperties_OutputType

Name	Description	Schema
supported-properties <i>optional</i>	Example : [<code>"GetSupportedServicePropertiesOutputSupportedPropertiesType"</code>]	< GetSupportedServicePropertiesOutputSupportedPropertiesType > array

HybridWanSiteInfoAccessInfoType

Name	Description	Schema
oam_traffic <i>optional</i>	Example : <code>"AccessInfoOamTrafficType"</code>	AccessInfoOamTrafficType
router_as_number <i>optional</i>	BGP as number on router. Saved as router_as_number in topology site properties. Example : <code>"string"</code>	string
router_name <i>optional</i>	Router name. Example : <code>"string"</code>	string
wan_traffic <i>optional</i>	Example : <code>"AccessInfoWanTrafficType"</code>	AccessInfoWanTrafficType

HybridWanSiteInfoDeviceDetailsType

Name	Description	Schema
activation_code <i>optional</i>	Activation code of the shipped device. Example : <code>"string"</code>	string
boot_image <i>optional</i>	Optional boot image canonical name for the device image that was previous uploaded to the image service. This image will be used to upgrade the device after it calls home. If not provided device will skip auto upgrade. NOTE: the boot image MUST be uploaded to the image service; this the canonical name is known when this API is invoked. Example : <code>"string"</code>	string
serial_number <i>optional</i>	Serial Number of the shipped device. Example : <code>"string"</code>	string

IdPermsType

Name	Description	Schema
creator <i>optional</i>	Example : <code>"string"</code>	string
description <i>optional</i>	Example : <code>"string"</code>	string
enable <i>optional</i>	Example : <code>true</code>	boolean
modifier <i>optional</i>	Example : <code>"string"</code>	string
permissions <i>optional</i>	Example : <code>"PermType"</code>	PermType
user-visible <i>optional</i>	Example : <code>true</code>	boolean
uuid <i>optional</i>	Example : <code>"UuidType"</code>	UuidType

ImportPopInputPopType

Name	Description	Schema
address <i>optional</i>	Example : <code>"PopAddressType"</code>	PopAddressType
coordinates <i>optional</i>	Example : <code>"PopCoordinatesType"</code>	PopCoordinatesType
dc_name <i>optional</i>	Name of the CSO region where this POP is managed. Example : <code>"string"</code>	string
device <i>optional</i>	Example : <code>"PopDeviceType"</code>	PopDeviceType
ems <i>optional</i>	Example : <code>"PopEmsType"</code>	PopEmsType
name <i>optional</i>	POP name. Example : <code>"string"</code>	enum (config, monitor)
vim <i>optional</i>	Example : <code>"PopVimType"</code>	PopVimType

ImportPop_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	Descriptive job name prefix of less than 16 characters. Example : <code>"string"</code>	string
pop <i>optional</i>	Example : <code>["ImportPopInputPopType"]</code>	< ImportPopInputPopType > array

ImportPop_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Default : "active" Example : "string"	enum (success, in-progress, failed)

ImportServiceProfile_InputType

Name	Description	Schema
name <i>required</i>	Name of the service profile. Example : "string"	string
nsdid <i>required</i>	NSO NSD package UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ImportServiceProfile_OutputType

Name	Description	Schema
service_profile_id <i>optional</i>	Returned service profile UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

InstancesVirtualResourcesType

Name	Description	Schema
id <i>optional</i>	Example : "string"	string

IpamScopelpPoolType

Name	Description	Schema
default_gw <i>optional</i>	Default gateway for the site. This gateway should be pre-configured on the provider side. Example : "string"	string
ip_prefix <i>optional</i>	IP prefix for the the site. Example : "string"	string
ipam_chunkid <i>optional</i>	IPAM service IP pool chunk ID. Example : "string"	string
ipam_pool_id <i>optional</i>	IP Pool UUID allocated by IPAM service. Example : "string"	string
scope_id <i>optional</i>	IPAM data scope UUID for the pool. Example : "string"	string

IpamScopeOamPoolType

Name	Description	Schema
default_gw <i>optional</i>	Default gateway for the site. This gateway should be pre-configured on the provider side. Example : <code>"string"</code>	string
ip_prefix <i>optional</i>	IP prefix for the the site. Example : <code>"string"</code>	string
ipam_chunkid <i>optional</i>	IPAM service IP pool chunk ID. Example : <code>"string"</code>	string
ipam_pool_id <i>optional</i>	IP Pool UUID allocated by IPAM service. Example : <code>"string"</code>	string
scope_id <i>optional</i>	IPAM data scope UUID for the pool. Example : <code>"string"</code>	string

LanSegmentGroupType

Name	Description	Schema
department <i>optional</i>	Default : <code>"Default"</code> Example : <code>"string"</code>	string
dhcp <i>optional</i>	Example : <code>true</code>	boolean
ip_prefix <i>optional</i>	Example : <code>"string"</code>	string
lan_ports <i>optional</i>	Example : <code>"string"</code>	string
lan_segment_name <i>optional</i>	Example : <code>"string"</code>	string

LeafrefType

The UUID of NSD package of this service profile.

Type : string

ManagedWanTopologyNetworkType

Name	Description	Schema
network_name <i>optional</i>	Name of the customer L3VPN network. Example : <code>"string"</code>	string
site <i>optional</i>	Example : <code>"NetworkSiteType"</code>	NetworkSiteType

ManagedWanTopologyV2SiteType

Name	Description	Schema
cloud_hub_site_info <i>optional</i>	Example : <code>"ManagedWanTopologyv2SiteCloudHubSiteInfoType"</code>	ManagedWanTopologyv2SiteCloudHubSiteInfoType

Name	Description	Schema
coordinates <i>optional</i>	Example : <code>"SiteCoordinatesType"</code>	SiteCoordinatesType
location <i>optional</i>	Example : <code>"SiteLocationType"</code>	SiteLocationType
on_premise_site_info <i>optional</i>	Example : <code>"ManagedWanTopologyv2SiteOnPremiseSiteInfoType"</code>	ManagedWanTopologyv2SiteOnPremiseSiteInfoType
properties <i>optional</i>	Example : <code>"SitePropertiesType"</code>	SitePropertiesType
service_properties <i>optional</i>	Example : <code>"SiteServicePropertiesType"</code>	SiteServicePropertiesType
site_description <i>optional</i>	User-entered additional information about that site. Example : <code>"string"</code>	string
site_name <i>optional</i>	Name of the site to be created in topology service and TSSM. Supports max of 15 characters only letters and digits are allowed. Example : <code>"string"</code>	string
tenant_name <i>optional</i>	Name of tenant created in IAM service and name of TSSM customer in that tenant. Example : <code>"string"</code>	string
user_defined_properties <i>optional</i>	Example : <code>"SiteUserDefinedPropertiesType"</code>	SiteUserDefinedPropertiesType

ManagedWanTopologyv2SiteCloudHubSiteInfoType

Name	Description	Schema
hub_device <i>optional</i>	Name of the hub device in the POP that will be used for this cloud SDWAN hub site. Example : <code>"string"</code>	string
pop <i>optional</i>	Name of the POP managing this site. Example : <code>"string"</code>	string
vrf_name <i>optional</i>	This is to support xCPE use case where we need to specify the VRF peered with Contrail for steering traffic to the service chain running in the Contrail cloud. Example : <code>"string"</code>	string
wan_links <i>optional</i>	List of WAN links that this tenant cloud hub site is assigned or authorized to use. When the hub device has multiple WAN links, this allows SP admins to assign specific WAN links to specific tenant cloud hub sites. Example : <code>"string"</code>	string

ManagedWanTopologyv2SiteOnPremiseSiteInfoType

Name	Description	Schema
device <i>optional</i>	Example : <code>"OnPremiseSiteInfoDeviceType"</code>	OnPremiseSiteInfoDeviceType
ha_info <i>optional</i>	Example : <code>"OnPremiseSiteInfoHaInfoType"</code>	OnPremiseSiteInfoHaInfoType

Name	Description	Schema
hashtag <i>optional</i>	Common hash tag. Example : "string"	string
hub_site <i>optional</i>	Name of the hub site to which spoke site connects. Optional parameter, needed only for spoke sites. Example : "string"	string
pop <i>optional</i>	Name of POP managing this site. Example : "string"	string
region <i>optional</i>	CSO region that manages this site. Example : "string"	string
site_group <i>optional</i>	Site group ID. Example : "string"	string
site_role <i>optional</i>	Site role. Example : "string"	enum (HUB, SPOKE, NONE, BOTH)
site_template <i>optional</i>	Site template UUID. Example : "string"	string

NetworkSiteCloudSiteInfoPopInfoType

Name	Description	Schema
left_virtual_n etworks <i>optional</i>	Example : "PopInfoLeftVirtualNetworksType"	PopInfoLeftVirtualNetworksType
pop_name <i>optional</i>	Name of POP managing the site. Example : "string"	string
route_target <i>optional</i>	Route target of the left network. Example : "string"	string

NetworkSiteCloudSiteInfoRouterInfoType

Name	Description	Schema
left_virtual_n etworks <i>optional</i>	Example : "RouterInfoLeftVirtualNetworksType"	RouterInfoLeftVirtualNetworksType
route_target <i>optional</i>	Route target of the left network. Example : "string"	string
router_name <i>optional</i>	Router name. Example : "string"	string
vrf_name <i>optional</i>	Virtual router function name. Example : "string"	string

NetworkSiteCloudSiteInfoType

Name	Description	Schema
assigned_resource_pool <i>optional</i>	Name of the assigned resource pool in NSO. Saved as respool_id in topology site properties. Example : "string"	string
assigned_vim <i>optional</i>	Optional, name of assigned VIM in NSO. If not specified, the first assigned_resource_pool name is used. Example : "string"	string

Name	Description	Schema
internet_info <i>optional</i>	Example : "CloudSiteInfoInternetInfoType"	CloudSiteInfoInternetInfoType
pop_info <i>optional</i>	Example : "NetworkSiteCloudSiteInfoPopInfoType"	NetworkSiteCloudSiteInfoPopInfoType
router_info <i>optional</i>	Example : "NetworkSiteCloudSiteInfoRouterInfoType"	NetworkSiteCloudSiteInfoRouterInfoType

NetworkSiteDataCenterSiteInfoType

Name	Description	Schema
assigned_resource_pool <i>optional</i>	Name of the assigned resource pool name in NSO for this site. Saved as resource pool id in topology site properties. Example : "string"	string
assigned_vim <i>optional</i>	Optional; name of assigned VIM in NSO. If not specified, the first VIM of the POP will be selected. Example : "string"	string
internet_info <i>optional</i>	Example : "DataCenterSiteInfoInternetInfoType"	DataCenterSiteInfoInternetInfoType
onboard <i>optional</i>	When set to true, imports named virtual network object from VIM; if false: creates a virtual network in VIM with the specified name. In both cases, link the VIM object to the entry with the same name within the local database object. Example : true	boolean
pop_name <i>optional</i>	Name of the POP managing the site. Example : "string"	string
route_target <i>optional</i>	Route target for corporate data center network. New Vlink with route-target and subnet is created and saved as corp_transit_net_id in topology site properties. Example : "string"	string
subnet <i>optional</i>	Subnet of corporate data center network. Example : "string"	string
vl_name <i>optional</i>	Name of the virtual link. Example : "string"	string

NetworkSiteOnPremiseSiteInfoType

Name	Description	Schema
access_info <i>optional</i>	Example : "OnPremiseSiteInfoAccessInfoType"	OnPremiseSiteInfoAccessInfoType
cpe_as_number <i>optional</i>	BGP as number on device. Saved as cpe_as_number in topology site properties. Example : "string"	string

NetworkSiteType

Name	Description	Schema
cloud_site_info <i>optional</i>	Example : "NetworkSiteCloudSiteInfoType"	NetworkSiteCloudSiteInfoType

Name	Description	Schema
coordinates <i>optional</i>	Example : "SiteCoordinatesType"	SiteCoordinatesType
data_center_site_info <i>optional</i>	Example : "NetworkSiteDataCenterSiteInfoType"	NetworkSiteDataCenterSiteInfoType
device_template_name <i>optional</i>	Device Template Name to control device configuration per site. Example : "string"	string
location <i>optional</i>	Example : "SiteLocationType"	SiteLocationType
on_premise_site_info <i>optional</i>	Example : "NetworkSiteOnPremiseSiteInfoType"	NetworkSiteOnPremiseSiteInfoType
properties <i>optional</i>	Example : "SitePropertiesType"	SitePropertiesType
service_properties <i>optional</i>	Example : "SiteServicePropertiesType"	SiteServicePropertiesType
site_description <i>optional</i>	User-entered additional information about the site. Example : "string"	string
site_name <i>optional</i>	Name of the site to be created in Topology service and TSSM. Supports max of 64 characters. First character should be an alpha-numeric character, while the remainder can be alpha-numeric or . (dot). Example : "string"	string
user_defined_properties <i>optional</i>	Example : "SiteUserDefinedPropertiesType"	SiteUserDefinedPropertiesType

[NetworksNetworkType](#)

Name	Description	Schema
network_name <i>optional</i>	Network name. Example : "string"	string
vpn_id <i>optional</i>	The POP vpn-uuid to which the customer is assigned. Example : "string"	string

[NfvServiceInstanceAppPointType](#)

Name	Description	Schema
app_point_path <i>optional</i>	UUID of service application point. For sites, links, or UCPE, the UUID of the site or link. For customer application points, should be empty. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
app_point_type <i>required</i>	Type of service application point. Example : "string"	enum (site-vpn, site-internet, customer-internet, ucpe)

NfvServiceInstanceConfigInputType

Name	Description	Schema
ccpe_service_config_variables <i>optional</i>	JSON input of PNF service config variables. Example : <code>"string"</code>	string
pnf_config <i>optional</i>	Example : [<code>"ConfigInputPnfConfigType"</code>]	< ConfigInputPnfConfigType > array
vnf_config <i>optional</i>	Example : [<code>"ConfigInputVnfConfigType"</code>]	< ConfigInputVnfConfigType > array

NfvServiceInstanceFinalPropsType

Name	Description	Schema
property <i>optional</i>	Example : [<code>"PropertiesType"</code>]	< PropertiesType > array

NfvServiceInstanceJobInfoType

Name	Description	Schema
job_name <i>optional</i>	job-name of last action applied to this service instance. Example : <code>"string"</code>	string
jsm_job_name <i>optional</i>	JSM job-name of last action applied to this service instance. Example : <code>"string"</code>	string

NfvServiceInstanceJsmStateType

The JSM service state.

Type : enum (none, initialized, instantiating, instantiated, starting, active, activating, updating, stopping, terminating, terminated, deleted, error, configuring, instantiation-rollback, resuming-instantiation, start-rollback, resuming-start, active-vnf-healing, active-ns-healing, active-ns-rollback, configure-rollback, resuming-configure, update-rollback, resuming-update, stop-rollback, resuming-stop, terminate-rollback, resuming-terminate, down-heal-disabled, pre-init, deactivating)

NfvServiceInstancePendingAttributesType

Name	Description	Schema
flavour <i>required</i>	NFV service instance flavor. Example : <code>"string"</code>	string
nfv-service-profile <i>optional</i>	Service profile UUID. Example : <code>"string"</code>	string

NfvServiceInstancePendingConfigInputType

Name	Description	Schema
ccpe_service_config_variables <i>optional</i>	JSON input of PNF service config variables. Example : "string"	string
pnf_config <i>optional</i>	Example : ["PendingConfigInputPnfConfigType"]	< PendingConfigInputPnfConfigType > array
vnf_config <i>optional</i>	Example : ["PendingConfigInputVnfConfigType"]	< PendingConfigInputVnfConfigType > array

NfvServiceInstancePendingFinalPropsType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesType"]	< PropertiesType > array

NfvServiceInstanceStateType

The service state.

Type : enum (none, initialized, instantiating, starting, active, activating, updating, stopping, terminating, error, configuring, out-of-sync)

NfvServiceProfileAllowedAppPointsType

Applicable service application points.

Type : enum (site-vpn, site-internet, customer-internet, ucpe)

NfvServiceProfileCategoryType

The category to which the service belongs, like Security or Routing.

Type : enum (Security, Networking, Routing, Switching, Other)

NfvServiceProfileCcpeApiMetaType

Name	Description	Schema
accept <i>optional</i>	The accept header for the REST request. Example : "string"	string
content_type <i>optional</i>	The content-type header for the rest request. Example : "string"	string
uri <i>required</i>	Service URI template, e.g. ccpe/customer/<customer.pnf-id>/site/<site.pnf-id>/dhcp-server. <customer.pnf-id> refers to a backend property. Example : "string"	string

NfvServiceProfileCustomizedModelsType

Name	Description	Schema
customized_model <i>optional</i>	Example : ["CustomizedModelsCustomizedModelType"]	< CustomizedModelsCustomizedModelType > array

NfvServiceProfileDeploymentFlagType

Type of deployment

Type : enum (xCPE, vCPE-Only, uCPE-Only)

NfvServiceProfilePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesType"]	< PropertiesType > array

NfvServiceProfileStatusType

Status of the service profile.

Type : enum (active, inactive)

NfvServiceProfileTargetTypeType

target type

Type : enum (ccpe, jsn)

OnPremiseSiteInfoAccessInfoType

Name	Description	Schema
oam_traffic <i>optional</i>	Example : "AccessInfoOamTrafficType"	AccessInfoOamTrafficType
router_as_number <i>optional</i>	BGP as number on router. Saved as router_as_number in topology site properties. Example : "string"	string
router_name <i>optional</i>	Router name. Example : "string"	string
wan_traffic <i>optional</i>	Example : "AccessInfoWanTrafficType"	AccessInfoWanTrafficType

OnPremiseSiteInfoDeviceType

Name	Description	Schema
cpe_as_number <i>optional</i>	Device CPE number. Example : "string"	string
device_details <i>optional</i>	Example : "DeviceDeviceDetailsType"	DeviceDeviceDetailsType

Name	Description	Schema
device_name <i>optional</i>	Device name. Example : "string"	string
device_template <i>optional</i>	Device template name. Example : "string"	string
lan_segment <i>optional</i>	Example : "DeviceLanSegmentType"	DeviceLanSegmentType
oam_traffic <i>optional</i>	Example : "DeviceOamTrafficType"	DeviceOamTrafficType
wan_link <i>optional</i>	Example : "DeviceWanLinkType"	DeviceWanLinkType

OnPremiseSiteInfoHaInfoType

Name	Description	Schema
ha_topology <i>optional</i>	Topology mode. Example : "string"	enum (STANDALONE, ACTIVE_ACTIVE, ACTIVE_STANDBY)

OnboardTenantInputDefaultSslProxyProfileType

Name	Description	Schema
enabled <i>optional</i>	If set to True, Default SSL FP will be generated for the tenant. In case of enabled, root CA must be provided and default_root_certificate becomes mandatory. Example : true	boolean

OnboardTenantInputDepartmentsType

Name	Description	Schema
department_name <i>optional</i>	Department name. Example : "string"	string
vpn_name <i>optional</i>	VPN name. Example : "string"	string

OnboardTenantInputManagedWanTopologyType

Name	Description	Schema
network <i>optional</i>	Example : "ManagedWanTopologyNetworkType"	ManagedWanTopologyNetworkType

OnboardTenantInputManagedWanTopologyV2Type

Name	Description	Schema
site <i>optional</i>	Example : "ManagedWanTopologyV2SiteType"	ManagedWanTopologyV2SiteType

OnboardTenantInputPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : "PropertiesType"	PropertiesType

OnboardTenantInputServicePropertiesType

Name	Description	Schema
name <i>optional</i>	Property name. Example : "string"	enum (config, monitor)
value <i>optional</i>	Property value in JSON string. Example : "string"	string

OnboardTenantInputTenantAdminType

Name	Description	Schema
admin_user_name <i>optional</i>	Name of admin user created in keystone for the tenant. Example : "string"	string
admin_user_password <i>optional</i>	Admin user password created in keystone for the tenant. Example : "string"	string
first_name <i>optional</i>	Admin user first name created in keystone for the tenant. Example : "string"	string
last_name <i>optional</i>	Admin user last name created in keystone for the tenant. Example : "string"	string
password_expiration_interval <i>optional</i>	Number of days password expires created in keystone for the tenant. Example : 0	integer(int32)

OnboardTenantInputUserDefinedPropertiesType

Name	Description	Schema
name <i>optional</i>	Property name. Example : "string"	enum (config, monitor)
value <i>optional</i>	Property value in JSON string. Example : "string"	string

OnboardTenantInputVimServiceProfilesType

Name	Description	Schema
profile_name <i>optional</i>	Profile name from VIM service (containing infra tenant information) associated with the CSP tenant. Example : "string"	string
vim_name <i>optional</i>	VIM name from VIM service. Example : "string"	string

OnboardTenantInputVpnType

Name	Description	Schema
vpn_name <i>optional</i>	VPN name. Example : <code>"string"</code>	string

OnboardTenant_InputType

Name	Description	Schema
default_ssl_proxy_profile <i>optional</i>	Example : <code>"OnboardTenantInputDefaultSslProxyProfileType"</code>	OnboardTenantInputDefaultSslProxyProfileType
departments <i>optional</i>	Example : <code>["OnboardTenantInputDepartmentsType"]</code>	<code>< OnboardTenantInputDepartmentsType ></code> array
flex_wan_topology <i>optional</i>	Example : <code>"[_csp-tssm_onboardtenantinputflexwantopologytype]"</code>	OnboardTenantInputFlexWanTopologyType
job_name_prefix <i>optional</i>	Descriptive job name prefix, less than 16 characters. Example : <code>"string"</code>	string
managed_wan_topology <i>optional</i>	Example : <code>"OnboardTenantInputManagedWanTopologyType"</code>	OnboardTenantInputManagedWanTopologyType
managed_wan_topology_v2 <i>optional</i>	Example : <code>"OnboardTenantInputManagedWanTopologyV2Type"</code>	OnboardTenantInputManagedWanTopologyV2Type
properties <i>optional</i>	Example : <code>"OnboardTenantInputPropertiesType"</code>	OnboardTenantInputPropertiesType
service_properties <i>optional</i>	Example : <code>["OnboardTenantInputServicePropertiesType"]</code>	<code>< OnboardTenantInputServicePropertiesType ></code> array
tenant_admin <i>optional</i>	Example : <code>"OnboardTenantInputTenantAdminType"</code>	OnboardTenantInputTenantAdminType
tenant_name <i>optional</i>	Name of tenant created in IAM service and name of TSSM customer in that tenant. Example : <code>"string"</code>	string
tenant_type <i>optional</i>	Tenant type: default, small, medium, large or xlarge. If not provided, default is assigned. Example : <code>"string"</code>	enum (default, small, medium, large, xlarge)
user_defined_properties <i>optional</i>	Example : <code>["OnboardTenantInputUserDefinedPropertiesType"]</code>	<code>< OnboardTenantInputUserDefinedPropertiesType ></code> array
vim_service_profiles <i>optional</i>	Example : <code>["OnboardTenantInputVimServiceProfilesType"]</code>	<code>< OnboardTenantInputVimServiceProfilesType ></code> array

Name	Description	Schema
vpn <i>optional</i>	Example : ["OnboardTenantInputVpnType"]	< OnboardTenantInputV pnType > array

OnboardTenant_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : " [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12} " Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

OverlayTunnelInfoPeerInfoType

Name	Description	Schema
interface_name <i>optional</i>	Underlay interface name on the peer device. Example : "string"	string
internet_gw_ip <i>optional</i>	Internet gateway IP for IPsec tunnel (optional). In the topology, the ip-sec device must have a list of enabled gateway interfaces declared in device.internet_gateway[]. If supplied, internet_gw_ip must be discoverable in device.internet_gateway[]. Example : "string"	string
peer_device <i>optional</i>	IPSec concentrator device name. Example : "string"	string

OverlayTunnelPeerInfoType

Name	Description	Schema
interface_name <i>optional</i>	Underlay interface name on the peer device. Example : "string"	string
internet_gw_ip <i>optional</i>	Internet gateway IP for IPsec tunnel (optional). In the topology, the ip-sec device must have a list of enabled gateway interfaces declared in device.internet_gateway[]. If supplied, internet_gw_ip must be discoverable in device.internet_gateway[]. Example : "string"	string
peer_device <i>optional</i>	IPSec concentrator device name. Example : "string"	string

PendingConfigInputPnfConfigPnfTransportSshOptionsCredentialType

Name	Description	Schema
password <i>optional</i>	Example : "string"	string

Name	Description	Schema
username <i>optional</i>	Example : <code>"string"</code>	string

PendingConfigInputPnfConfigPnfTransportSshOptionsType

Name	Description	Schema
auth_key <i>optional</i>	Example : <code>"string"</code>	string
credential <i>optional</i>	Example : <code>"PendingConfigInputPnfConfigPnfTransportSshOptionsCredentialType"</code>	PendingConfigInputPnfConfigPnfTransportSshOptionsCredentialType

PendingConfigInputPnfConfigPnfTransportType

Name	Description	Schema
ssh_options <i>optional</i>	Example : <code>"PendingConfigInputPnfConfigPnfTransportSshOptionsType"</code>	PendingConfigInputPnfConfigPnfTransportSshOptionsType

PendingConfigInputPnfConfigType

Name	Description	Schema
component_name <i>optional</i>	Example : <code>"string"</code>	string
function_config <i>optional</i>	Example : <code>"PnfConfigFunctionConfigType"</code>	PnfConfigFunctionConfigType
pnf_address <i>optional</i>	Example : <code>"string"</code>	string
pnf_device <i>optional</i>	Example : <code>"string"</code>	string
pnf_transport <i>optional</i>	Example : <code>"PendingConfigInputPnfConfigPnfTransportType"</code>	PendingConfigInputPnfConfigPnfTransportType
pnfid <i>optional</i>	PNF uuid. Example : <code>"string"</code>	string
region <i>optional</i>	Example : <code>"string"</code>	string

PendingConfigInputVnfConfigType

Name	Description	Schema
function_config <i>optional</i>	Example : <code>"VnfConfigFunctionConfigType"</code>	VnfConfigFunctionConfigType
vnfid <i>optional</i>	VNF UUID. Example : <code>"string"</code>	string

PermType

Name	Description	Schema
group <i>optional</i>	Example : <code>"string"</code>	string
group_access <i>optional</i>	Example : <code>0</code>	integer(int32)
other_access <i>optional</i>	Example : <code>0</code>	integer(int32)
owner <i>optional</i>	Example : <code>"string"</code>	string
owner_access <i>optional</i>	Example : <code>0</code>	integer(int32)

PermType2

Name	Description	Schema
global-access <i>optional</i>	Example : <code>0</code>	integer(int32)
owner <i>optional</i>	Example : <code>"string"</code>	string
owner-access <i>optional</i>	Example : <code>0</code>	integer(int32)
share <i>optional</i>	Example : <code>["ShareType"]</code>	< ShareType > array

PnfConfigFunctionConfigType

Name	Description	Schema
functionid <i>optional</i>	PNF functional service name. Example : <code>"string"</code>	string

PnfConfigureInputDeviceType

Name	Description	Schema
config_template <i>optional</i>	Config template ID. Example : <code>"string"</code>	string
pnf_device_uuid <i>optional</i>	NSO PNF device UUID. Example : <code>"string"</code>	string
site_id <i>optional</i>	Optional TSSM site UUID, used to create a unique site-specific abstract config name sent to NSO. Example : <code>"string"</code>	string

PnfConfigure_InputType

Name	Description	Schema
device <i>optional</i>	Example : ["PnfConfigureInputDeviceType"]	< PnfConfigureInputDeviceType > array

PnfConfigure_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

PopAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Optional. Country name. Example : "string"	string
state <i>optional</i>	State name. Default : "provisioned" Example : "string"	enum (provisioned, activating, activated, deleted)
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

PopCoordinatesType

Name	Description	Schema
latitude <i>optional</i>	Geo latitude value for location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Geo longitude value for location in decimal degree. Example : "string"	string

PopDeviceType

Name	Description	Schema
assigned_device_profile <i>optional</i>	Name of the device profile assigned to this device. For the vCPE case, this device profile contains configuration templates for two UI workflows: - A workflow can be invoked after device is discovered to configure the device as DC gateway with BGP peering to Contrail, management & internet VRF configuration. This workflow should be invoked once after POP import workflow for all tenants. - Another workflow can be invoked per customer site to configure the BGP peering and site VRF. This workflow should be invoked after onboarding the site. For the uCPE case, this device profile contains the configuration template for the ZTP workflow that configures the IPsec concentrator device for the OTT link from uCPE device Example : "string"	string
authentication <i>optional</i>	Example : "DeviceAuthenticationType"	DeviceAuthenticationType
device_ip <i>optional</i>	Router management IP addresses. Example : "string"	string
family <i>optional</i>	Router device family. Example : "string"	string
internet_gateway <i>optional</i>	Required for ipsec devices. Collection of interfaces exposed for ipsec VPN tunnel creation. That address will be used to create VPN tunnel in the solution. Address must be enabled for access. Example : "string"	string
management_state <i>optional</i>	Optional. Flag for CSP device discovery. If set to 'managed', import-pop will try to discover device. Only if discovery is successful, device will be created in the topology. If management state is set to 'unmanaged', device will be created in topology only, and will not be managed by the csp solution. Default : "managed" Example : "string"	enum (managed, unmanaged)
name <i>optional</i>	Router name. Example : "string"	enum (config, monitor)
pnf_package <i>optional</i>	Name of package providing metadata and configuration templates needed to program a PNF device for service chain attachments. Example : "string"	string
properties <i>optional</i>	Example : "DevicePropertiesType"	DevicePropertiesType

PopEmsType

Name	Description	Schema
auth_url <i>optional</i>	EMS authentication URL. Example : "string"	string
ip <i>optional</i>	EMS management IP address. Example : "string"	string
name <i>optional</i>	EMS name. Example : "string"	enum (config, monitor)
password <i>optional</i>	EMS authentication password. Example : "string"	string
username <i>optional</i>	EMS authentication user name. Example : "string"	string

Name	Description	Schema
vendor <i>optional</i>	EMS vendor name. Example : "string"	string
version <i>optional</i>	EMS version. Example : "string"	string

PopInfoLeftVirtualNetworksType

Name	Description	Schema
right_network_name <i>optional</i>	The data center site name of the right network. A special name 'INTERNET' is used for Internet breakout. Example : "string"	string
subnet <i>optional</i>	The subnet of the left network corresponding to the above right network. Example : "string"	string

PopPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : ["PropertiesType"]	< PropertiesType > array

PopVimType

Name	Description	Schema
cloud <i>optional</i>	Example : "VimCloudType"	VimCloudType
name <i>optional</i>	VIM name Example : "string"	enum (config, monitor)
vim_type <i>optional</i>	VIM type, either cloud or uCPE. Default : "uCPE" Example : "string"	string

ProgressType

Percentage of progress completed.

Type : integer

PropertiesType

Name	Description	Schema
name <i>optional</i>	Example : "string"	enum (config, monitor)

QuotaType

Name	Description	Schema
access-control-list <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
bgp-router <i>optional</i>	Example : 0	integer(int32)
defaults <i>optional</i>	Example : 0	integer(int32)
floating-ip <i>optional</i>	Example : 0	integer(int32)
floating-ip-pool <i>optional</i>	Example : 0	integer(int32)
global-vrouter-config <i>optional</i>	Example : 0	integer(int32)
instance-ip <i>optional</i>	Example : 0	integer(int32)
loadbalancer-healthmonitor <i>optional</i>	Example : 0	integer(int32)
loadbalancer-member <i>optional</i>	Example : 0	integer(int32)
loadbalancer-pool <i>optional</i>	Example : 0	integer(int32)
logical-router <i>optional</i>	Example : 0	integer(int32)
network-ipam <i>optional</i>	Example : 0	integer(int32)
security-group <i>optional</i>	Example : 0	integer(int32)
security-group-rule <i>optional</i>	Example : 0	integer(int32)
service-instance <i>optional</i>	Example : 0	integer(int32)
service-template <i>optional</i>	Example : 0	integer(int32)
subnet <i>optional</i>	Example : 0	integer(int32)
virtual-DNS <i>optional</i>	Example : 0	integer(int32)
virtual-DNS-record <i>optional</i>	Example : 0	integer(int32)
virtual-ip <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
virtual-machine-interface <i>optional</i>	Example : 0	integer(int32)
virtual-network <i>optional</i>	Example : 0	integer(int32)
virtual-router <i>optional</i>	Example : 0	integer(int32)

RbacPermType

Name	Description	Schema
role_crud <i>optional</i>	Example : "string"	string
role_name <i>optional</i>	Example : "string"	string

RbacRuleEntriesType

Name	Description	Schema
rbac-rule <i>optional</i>	Example : ["RbacRuleType"]	< RbacRuleType > array

RbacRuleType

Name	Description	Schema
rule_field <i>optional</i>	Example : "string"	string
rule_object <i>optional</i>	Example : "string"	string
rule_perms <i>optional</i>	Example : "RbacPermType"	RbacPermType

RecallDeviceInputDeviceType

Name	Description	Schema
force_delete <i>optional</i>	If any device error occurs during the deletion, ignore the error and proceed with deleting the VM from the VIM-database. Example : true	boolean
fqname <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

RecallDevice_InputType

Name	Description	Schema
device <i>optional</i>	Example : "RecallDeviceInputDeviceType"	RecallDeviceInputDeviceType

Name	Description	Schema
url <i>optional</i>	AMQP URL where response message will be posted. Example : "string"	string

RecallDevice_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

RecallDevicesInputDevicesType

Name	Description	Schema
device_uuid <i>optional</i>	Topology UUID for the shipped device to be deleted. Example : "string"	string

RecallDevices_InputType

Name	Description	Schema
devices <i>optional</i>	Example : ["RecallDevicesInputDevicesType"]	< RecallDevicesInputDevicesType > array

RecallDevices_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Failure reason. Example : "string"	string
status <i>optional</i>	Success or failure. Default : "active" Example : "string"	enum (success, in-progress, failed)

RemovePopInputPopType

Name	Description	Schema
name <i>optional</i>	Name of the POP. Example : "string"	enum (config, monitor)

RemovePop_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	Descriptive job name prefix, less than 16 characters. Example : "string"	string
pop <i>optional</i>	Example : ["RemovePopInputPopType"]	< RemovePopInputPopType > array

RemovePop_OutputType

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

RemoveSiteInputSitesType

Name	Description	Schema
site_name <i>optional</i>	TSSM site name to be removed. Example : "string"	string

RemoveSite_InputType

Name	Description	Schema
forced <i>optional</i>	True if all existing association need to be removed automatically. Example : true	boolean
job_name_prefix <i>optional</i>	A descriptive job name prefix, less than 16 characters. Example : "string"	string
remove_tenant <i>optional</i>	True if Tenant should be removed. Example : true	boolean
sites <i>optional</i>	Example : ["RemoveSiteInputSitesType"]	< RemoveSiteInputSitesType > array
tenant_name <i>optional</i>	Name of tenant to be removed. Example : "string"	string

RemoveSite_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job Example : "string"	string

Name	Description	Schema
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

RouterInfoLeftVirtualNetworksType

Name	Description	Schema
right_network_name <i>optional</i>	Data center site name of the right network. A special name 'INTERNET' is used for internet breakout. Example : "string"	string
subnet <i>optional</i>	The subnet of the left network corresponding to the above right network. Example : "string"	string

ServiceConfigure_InputType

Name	Description	Schema
instance_uuid <i>required</i>	Service instance UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ServiceConfigure_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	ID of asynchronous job. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ServiceInfoServicePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : "PropertiesType"	PropertiesType

ServiceInstantiateAndStart_InputType

Name	Description	Schema
instance_uuid <i>required</i>	Service instance UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ServiceInstantiateAndStart_OutputType

Name	Description	Schema
job_id <i>optional</i>	A Job ID for this job. Example : "string"	string
jobid <i>optional</i>	ID of asynchronous job Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ServicePropertiesPropertyType

Name	Description	Schema
name <i>optional</i>	property name Example : "string"	enum (config, monitor)

ServiceTerminate_InputType

Name	Description	Schema
force_delete <i>optional</i>	Force delete all service instance components. Example : true	boolean
instance_uuid <i>required</i>	Service instance UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ServiceTerminate_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	ID of asynchronous job. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ServiceUpdate_InputType

Name	Description	Schema
instance_uuid <i>required</i>	Service instance UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

ServiceUpdate_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string

Name	Description	Schema
jobid <i>optional</i>	ID of asynchronous job. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

SetServicePropertiesInputServicePropertiesType

Name	Description	Schema
name <i>optional</i>	Property name. Example : "string"	enum (config, monitor)
value <i>optional</i>	Property value in JSON string. Example : "string"	string

SetServiceProperties_InputType

Name	Description	Schema
instance_uuid <i>required</i>	TSSM service instance UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
service_properties <i>optional</i>	Example : ["SetServicePropertiesInputServicePropertiesType"]	< SetServicePropertiesInputServicePropertiesType > array

SetServiceProperties_OutputType

Name	Description	Schema
result <i>optional</i>	Result string Example : "string"	string

ShareType

Name	Description	Schema
tenant <i>optional</i>	Example : "string"	string
tenant_access <i>optional</i>	Example : 0	integer(int32)

ShipDeviceInputShippedDeviceType

Name	Description	Schema
activation_code <i>optional</i>	Activation code of the shipped device. Example : "string"	string

Name	Description	Schema
boot_image <i>optional</i>	Optional boot image canonical name for the device image that was previous uploaded to the image service. This image will be used to upgrade the device after it calls home. If not provided, the device will skip auto upgrade. NOTE: The boot image MUST be uploaded to image service so this the canonical name is known when this API is invoked. Example : "string"	string
customer_name <i>optional</i>	TSSM tenant/customer name to which the site device will be added. Example : "string"	string
device_name <i>optional</i>	Name of the device to be shipped. Example : "string"	string
serial_number <i>optional</i>	Serial Number of the shipped device. Example : "string"	string
site_name <i>optional</i>	TSSM site name to which device will be added. Example : "string"	string

ShipDevice_InputType

Name	Description	Schema
job_name_prefix <i>optional</i>	A descriptive job name prefix, less than 16 characters. Example : "string"	string
shipped_device <i>optional</i>	Example : ["ShipDeviceInputShippedDeviceType"]	< ShipDeviceInputShippedDeviceType > array

ShipDevice_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job Example : "string"	string
jobid <i>optional</i>	Return job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Reason for failure. Example : "string"	string
status <i>optional</i>	Success or failure. Example : "string"	enum (success, in-progress, failed)

SiteActivateInputSiteType

Name	Description	Schema
site_uuid <i>optional</i>	TSSM site UUID. Example : "string"	string

SiteActivateOutputJobType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	Returns job UUID. Example : "string"	string

SiteActivate_InputType

Name	Description	Schema
site <i>optional</i>	Example : ["SiteActivateInputSiteType"]	< SiteActivateInputSiteType > array

SiteActivate_OutputType

Name	Description	Schema
job <i>optional</i>	Example : ["SiteActivateOutputJobType"]	< SiteActivateOutputJobType > array

SiteBasicPropertiesDeviceTemplateType

Name	Description	Schema
device_name <i>optional</i>	Device name. Example : "string"	string
lan_segment <i>optional</i>	Example : "DeviceTemplateLanSegmentType"	DeviceTemplateLanSegmentType
template_name <i>optional</i>	Device template name. Example : "string"	string
wan_link_info <i>optional</i>	Example : "DeviceTemplateWanLinkInfoType"	DeviceTemplateWanLinkInfoType

SiteBasicPropertiesSiteAddressType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Optional. Country name. Example : "string"	string
state <i>optional</i>	State name. Default : "provisioned" Example : "string"	enum (provisioned, activating, activated, deleted)
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

SiteBasicPropertiesSiteContactType

Name	Description	Schema
contact_name <i>optional</i>	Name of the person that the tenant admin can contact if help is needed at the site. Example : "string"	string
email_address <i>optional</i>	Email address for site contact. Example : "string"	string
phone_number <i>optional</i>	Phone number for site contact. Example : "string"	string

SiteCoordinatesType

Name	Description	Schema
latitude <i>optional</i>	Latitude value of geo location in decimal degree. Example : "string"	string
longitude <i>optional</i>	Longitude value of geo location in decimal degree. Example : "string"	string

SiteDeactivateInputSiteType

Name	Description	Schema
site_uuid <i>optional</i>	Site identifier. Example : "string"	string

SiteDeactivateOutputJobType

Name	Description	Schema
job_id <i>optional</i>	Job ID for this job. Example : "string"	string
jobid <i>optional</i>	Return job UUID. Example : "string"	string

SiteDeactivate_InputType

Name	Description	Schema
site <i>optional</i>	Example : ["SiteDeactivateInputSiteType"]	< SiteDeactivateInputSiteType > array

SiteDeactivate_OutputType

Name	Description	Schema
job <i>optional</i>	Example : ["SiteDeactivateOutputJobType"]	< SiteDeactivateOutputJobType > array

SiteInfoSitePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : "PropertiesType"	PropertiesType

SiteInfoUserDefinedSitePropertiesType

Name	Description	Schema
name <i>optional</i>	Property name. Example : "string"	enum (config, monitor)
value <i>optional</i>	Property value in JSON string. Example : "string"	string

SitelpamScopeType

Name	Description	Schema
ip_pool <i>optional</i>	Example : "IpamScopeIpPoolType"	IpamScopeIpPoolType
oam_pool <i>optional</i>	Example : "IpamScopeOamPoolType"	IpamScopeOamPoolType

SiteLocationType

Name	Description	Schema
city <i>optional</i>	City name. Example : "string"	string
country <i>optional</i>	Optional. Country name. Example : "string"	string
state <i>optional</i>	State name. Example : "string"	enum (provisioned, activating, activated, deleted)
street <i>optional</i>	Street name and number. Example : "string"	string
street2 <i>optional</i>	Street name and number. Example : "string"	string
zip_code <i>optional</i>	Zip code. Example : "string"	string

SitePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : "PropertiesType"	PropertiesType

SiteServicePropertiesType

Name	Description	Schema
property <i>optional</i>	Example : "ServicePropertiesPropertyType"	ServicePropertiesPropertyType

SiteSiteBasicPropertiesType

Name	Description	Schema
cloud_service <i>optional</i>	Cloud service. Example : "string"	enum (EDGE, HUB, NONE)
device_template <i>optional</i>	Example : "SiteBasicPropertiesDeviceTemplateType"	SiteBasicPropertiesDeviceTemplateType
site_address <i>optional</i>	Example : "SiteBasicPropertiesSiteAddressType"	SiteBasicPropertiesSiteAddressType
site_contact <i>optional</i>	Example : "SiteBasicPropertiesSiteContactType"	SiteBasicPropertiesSiteContactType
site_description <i>optional</i>	Additional information about the site that is user-entered. Example : "string"	string
site_group <i>optional</i>	site_group to which the site belongs. Example : "string"	string
site_role <i>optional</i>	Site role. Example : "string"	enum (HUB, SPOKE, NONE, BOTH)
site_type <i>optional</i>	Topology deployment type. Example : "string"	enum (cloud, on_premise, data_center)

SiteSiteTypeType

Topology deployment type.

Type : enum (cloud, on_premise, data_center)

SiteStateType

The site state to keep track of whether all services deployment completed.

Type : enum (onboarding, failed, provisioned, activating, activated)

SiteUserDefinedPropertiesType

Name	Description	Schema
name <i>optional</i>	Property name. Example : "string"	enum (config, monitor)
value <i>optional</i>	Property value in JSON string. Example : "string"	string

StartDeviceActivation_InputType

Name	Description	Schema
device_uuid <i>required</i>	UUID of device from ems-central service. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

Name	Description	Schema
prev_job_id <i>optional</i>	Previous job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

StartDeviceActivation_OutputType

Name	Description	Schema
job_id <i>optional</i>	Job UUID. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string
reason <i>optional</i>	Reason for failure. Example : "string"	string

SyncServiceInstance_InputType

Name	Description	Schema
instance_uuid <i>required</i>	Synchronize service instance state with NSO state. Pattern : "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" Example : "string"	string

SyncServiceInstance_OutputType

Name	Description	Schema
new_state <i>optional</i>	New service instance state. Example : "string"	enum (none, created, instantiating, instantiated, starting, active, updating, stopping, terminating, terminated, deleted, error, configuring)
old_state <i>optional</i>	Previous service instance state. Example : "string"	enum (none, starting, active, stopping, updating, error, configuring, out-of-sync)
updated <i>optional</i>	True if service instance is updated after synchronization. Example : true	boolean

TenantInfoTenantPropertiesType

Name	Description	Schema
property <i>optional</i>	Example : "PropertiesType"	PropertiesType

TenantInfoUserDefinedTenantPropertiesType

Name	Description	Schema
name <i>optional</i>	Property name. Example : <code>"string"</code>	enum (config, monitor)
value <i>optional</i>	Property value in JSON string. Example : <code>"string"</code>	string

UuidType

Name	Description	Schema
uuid_lslong <i>optional</i>	Example : <code>0</code>	integer(int64)
uuid_mslong <i>optional</i>	Example : <code>0</code>	integer(int64)

VdusInstancesType

Name	Description	Schema
id <i>optional</i>	Example : <code>"string"</code>	string
vc_id <i>optional</i>	Example : <code>"string"</code>	string
vim_id <i>optional</i>	Example : <code>"string"</code>	string
virtual_resources <i>optional</i>	Example : <code>"InstancesVirtualResourcesType"</code>	InstancesVirtualResourcesType

VimCloudType

Name	Description	Schema
address <i>optional</i>	VIM management IP address. Example : <code>"string"</code>	string
auth_url <i>optional</i>	Authentication URL of the VIM if its IP differs from management address. Example : <code>"string"</code>	string
default_domain <i>optional</i>	VIM default domain. Example : <code>"string"</code>	string
default_tenant <i>optional</i>	VIM default tenant. Example : <code>"string"</code>	string
internet_network <i>optional</i>	Example : <code>"CloudInternetNetworkType"</code>	CloudInternetNetworkType
mgmt_network <i>optional</i>	Example : <code>"CloudMgmtNetworkType"</code>	CloudMgmtNetworkType
password <i>optional</i>	VIM authentication password. Example : <code>"string"</code>	string
resource_pool <i>optional</i>	Example : <code>"CloudResourcePoolType"</code>	CloudResourcePoolType

Name	Description	Schema
username <i>optional</i>	VIM authentication user name. Example : "string"	string
vim_service_profiles <i>optional</i>	Example : "CloudVimServiceProfilesType"	CloudVimServiceProfilesType

VimServiceProfilesServiceProfilesType

Name	Description	Schema
domain_name <i>optional</i>	Name of the infra domain. Example : "string"	string
password <i>optional</i>	Password used for the tenant user. Example : "string"	string
service_profile_name <i>optional</i>	Name of the service profile in VIM instance. Example : "string"	string
tenant_name <i>optional</i>	Name of the infra tenant. Example : "string"	string
user_name <i>optional</i>	Name of the tenant user. Example : "string"	string

VnfConfigFunctionConfigType

Name	Description	Schema
functionid <i>optional</i>	VNF functional service name. Example : "string"	string

VnfInfoAuditLogsType

Name	Description	Schema
audit_log <i>optional</i>	Example : "string"	string
datetime <i>optional</i>	Example : "string"	string
details <i>optional</i>	Example : "string"	string
id <i>optional</i>	Example : "string"	string

VnfInfoEmsAccessAttributesType

Name	Description	Schema
attribute_id <i>optional</i>	Example : "string"	string
value <i>optional</i>	Example : "string"	string

VnflInfoInternalInfoType

Name	Description	Schema
param_id <i>optional</i>	Example : <code>"string"</code>	string
value <i>optional</i>	Example : <code>"string"</code>	string

VnflInfoLifeCycleEventHistoryType

Name	Description	Schema
datetime <i>optional</i>	Example : <code>"string"</code>	string
event_log <i>optional</i>	Example : <code>"string"</code>	string
id <i>optional</i>	Example : <code>"string"</code>	string

VnflInfoMonitoringParamsType

Name	Description	Schema
description <i>optional</i>	Description Example : <code>"string"</code>	string
param_id <i>optional</i>	Example : <code>"string"</code>	string

VnflInfoVdusType

Name	Description	Schema
instances <i>optional</i>	Example : <code>"VdusInstancesType"</code>	VdusInstancesType
vdus_id <i>optional</i>	Example : <code>"string"</code>	string

VnflInfoVnfAddressType

Name	Description	Schema
addr <i>optional</i>	Example : <code>"string"</code>	string
id <i>optional</i>	Example : <code>"string"</code>	string
login <i>optional</i>	Example : <code>"string"</code>	string
password <i>optional</i>	Example : <code>"string"</code>	string
type_ <i>optional</i>	Example : <code>"string"</code>	enum (STR, NUM)

Name	Description	Schema
vdu_instance_id <i>optional</i>	Example : <code>"string"</code>	string

VnflInfoVnfConnectionPointsType

Name	Description	Schema
description <i>optional</i>	Description of the connection point Example : <code>"string"</code>	string
id <i>optional</i>	Example : <code>"string"</code>	string
virtual_link_reference <i>optional</i>	Example : <code>"string"</code>	string

WanLinkInfoStaticIpAssignmentType

Name	Description	Schema
gateway_ip <i>optional</i>	Gateway IP address. Example : <code>"string"</code>	string
ip_address <i>optional</i>	IP address prefix assigned to this data link. Example : <code>"string"</code>	string

WanLinkOverlayTunnelType

Name	Description	Schema
peer_info <i>optional</i>	Example : <code>"OverlayTunnelPeerInfoType"</code>	OverlayTunnelPeerInfoType
tunnel_destination_ip <i>optional</i>	Tunnel destination IP address. Example : <code>"string"</code>	string
tunnel_endpoint_role <i>optional</i>	End point role. Example : <code>"string"</code>	enum (HUB, SPOKE)
tunnel_source_ip <i>optional</i>	Tunnel source IP address. Example : <code>"string"</code>	string
tunnel_type <i>optional</i>	WAN link type. Example : <code>"string"</code>	enum (IPSEC, GRE, GRE_IPSEC)
vpn_name <i>optional</i>	VPN name. Example : <code>"string"</code>	string
vrf_name <i>optional</i>	Data access link VRF name. Example : <code>"string"</code>	string

WanLinkStaticIpAssignmentType

Name	Description	Schema
gateway_ip <i>optional</i>	Gateway IP address. Example : <code>"string"</code>	string

Name	Description	Schema
ip_address <i>optional</i>	IP address prefix assigned to this data link. Example : "string"	string

WanTrafficIpsecInfoType

Name	Description	Schema
internet_gw_ip <i>optional</i>	Optional. Internet gateway IP for ipsec tunnel. The ip-sec device in topology must have a list of enabled gateway interfaces declared in device.internet_gateway[]. If supplied, internet_gw_ip must be found in device.internet_gateway[]. Example : "string"	string
ipsec_concentrator_name <i>optional</i>	IPSec concentrator device name. Example : "string"	string

YangUuidType

NS instance UUID of the virtual network service in JSM.

Type : string

access-control-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

access-control-list{id}

Name	Description	Schema
access-control-list-entries <i>optional</i>	Example : "AclEntriesType"	AclEntriesType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

add-delete-lan-segments-input

Name	Description	Schema
input <i>optional</i>	Example : "AddDeleteLanSegments_InputType"	AddDeleteLanSegments_InputType

add-delete-lan-segments-output

Name	Description	Schema
output <i>optional</i>	Example : "AddDeleteLanSegments_OutputType"	AddDeleteLanSegments_OutputType

add-department-to-site-input

Name	Description	Schema
input <i>optional</i>	Example : "AddDepartmentToSite_InputType"	AddDepartmentToSite_InputType

add-department-to-site-output

Name	Description	Schema
output <i>optional</i>	Example : "AddDepartmentToSite_OutputType"	AddDepartmentToSite_OutputType

add-department-to-vpn-input

Name	Description	Schema
input <i>optional</i>	Example : "AddDepartmentToVpn_InputType"	AddDepartmentToVpn_InputType

add-department-to-vpn-output

Name	Description	Schema
output <i>optional</i>	Example : "AddDepartmentToVpn_OutputType"	AddDepartmentToVpn_OutputType

add-site-to-vpn-input

Name	Description	Schema
input <i>optional</i>	Example : "AddSiteToVpn_InputType"	AddSiteToVpn_InputType

add-site-to-vpn-output

Name	Description	Schema
output <i>optional</i>	Example : "AddSiteToVpn_OutputType"	AddSiteToVpn_OutputType

api-access-list

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

api-access-list{id}

Name	Description	Schema
api-access-list-entries <i>optional</i>	Example : <code>"RbacRuleEntriesType"</code>	RbacRuleEntriesType
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

config-root

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

config-root{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain <i>optional</i>	Example : <code>["_csp-tssm_config-root_id_domain"]</code>	< config-root{id}_domain > array
global-system-config <i>optional</i>	Example : <code>["_csp-tssm_config-root_id_global-system-config"]</code>	< config-root{id}_global-system-config > array
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

configure-sites-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ConfigureSites_InputType"</code>	ConfigureSites_InputType

configure-sites-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ConfigureSites_OutputType"</code>	ConfigureSites_OutputType

create-sites-input

Name	Description	Schema
input <i>optional</i>	Example : "CreateSites_InputType"	CreateSites_InputType

create-sites-output

Name	Description	Schema
output <i>optional</i>	Example : "CreateSites_OutputType"	CreateSites_OutputType

customer

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

customer{id}

Name	Description	Schema
contact_name <i>optional</i>	Customer contact. Example : "string"	string
default_ssl_proxy_profile <i>optional</i>	Optional. Initial Enable/Disable Default SSL FP Generation. Example : "CustomerDefaultSslProxyProfileType"	CustomerDefaultSslProxyProfileType
deployment_scenario <i>optional</i>	Deployment scenario. Example : "CustomerDeploymentScenarioType"	CustomerDeploymentScenarioType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
networks <i>optional</i>	Customer networks. Example : "CustomerNetworksType"	CustomerNetworksType
nfv-service-instance <i>optional</i>	Example : ["[_csp-tssm_customer_id_nfv-service-instance]"]	< customer{id}_nfv-service-instance > array
nfv-service-profile <i>optional</i>	Example : ["[_csp-tssm_customer_id_nfv-service-profile]"]	< customer{id}_nfv-service-profile > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pnfid <i>optional</i>	Customer ID created by CCPE legacy portal. This is not visible to customer admin. Example : 0	integer(int32)
pop <i>optional</i>	Example : ["[_csp-tssm_customer_id_pop]"]	< customer{id}_pop > array

Name	Description	Schema
properties <i>optional</i>	Customer level provisioning properties. Example : " CustomerPropertiesType "	CustomerPropertiesType
resource-pool <i>optional</i>	Example : [" [_csp-tssm_customer_id_resource-pool] "]	< customer{id}_resource-pool > array
route_target <i>optional</i>	List of route targets of the customer transit net. Example : " string "	string
service_properties <i>optional</i>	Customer-specific default service property values. Example : " CustomerServicePropertiesType "	CustomerServicePropertiesType
site <i>optional</i>	Example : [" [_csp-tssm_customer_id_site] "]	< customer{id}_site > array
subnet <i>optional</i>	List of subnet IPV4 address of the customer transit net. Example : " string "	string
tenant_existed <i>optional</i>	Value existed if tenant pre-existed in keystone. Delete customer will not try to delete that tenant from keystone. Example : " CustomerTenantExistedType "	CustomerTenantExistedType
tenant_type <i>optional</i>	Tenant type: default, small, medium, large or xlarge. Example : " CustomerTenantTypeType "	CustomerTenantTypeType
tenantid <i>optional</i>	Tenant id of the customer. Example : " string "	string
ui_layout <i>optional</i>	UI topology information of the customer. A topology object records user's customization to its topology UI. Example : " CustomerUiLayoutType "	CustomerUiLayoutType
user_defined_properties <i>optional</i>	Optional. Customer-level context user specified properties (non-csp-related). Intended for use by 3rd parties. Example : " CustomerUserDefinedPropertiesType "	CustomerUserDefinedPropertiesType
vim_service_profiles <i>optional</i>	Optional. Map of vim:serviceProfile associations for non-shared keystone deployment. Assumption : sites pointing to same VIM must always use the same profile, so association will be made per tenant/vim/profile. The map will be stored in <code>../tssm/customer/vim_service_profiles</code> VIM will retrieve the tenant from its DB and check if there is a service profile associated with the tenant. If there is no service profile associated with the tenant, then VIM will use the default service profile if it is available in the vim-instance record. If there are no service profiles associated with the vim-instance, then VIM uses the CSP auth-token (it assumes that CSP keystone and VIM keystone are same). Example : " CustomerVimServiceProfilesType "	CustomerVimServiceProfilesType
vpn_id <i>optional</i>	The POP vpn-uuid to which the customer is assigned. Example : " YangUuidType "	YangUuidType

delete-department-from-site-input

Name	Description	Schema
input <i>optional</i>	Example : " DeleteDepartmentFromSite_InputType "	DeleteDepartmentFromSite_InputType

delete-department-from-site-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteDepartmentFromSite_OutputType"</code>	DeleteDepartmentFromSite_OutputType

delete-department-from-vpn-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteDepartmentFromVpn_InputType"</code>	DeleteDepartmentFromVpn_InputType

delete-department-from-vpn-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteDepartmentFromVpn_OutputType"</code>	DeleteDepartmentFromVpn_OutputType

delete-site-from-vpn-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"DeleteSiteFromVpn_InputType"</code>	DeleteSiteFromVpn_InputType

delete-site-from-vpn-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"DeleteSiteFromVpn_OutputType"</code>	DeleteSiteFromVpn_OutputType

domain

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

domain{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-tssm_domain_id_api-access-list"]</code>	<code>< domain{id}_api-access-list ></code> array
display-name <i>optional</i>	Example : <code>"string"</code>	string
domain-limits <i>optional</i>	Example : <code>"DomainLimitsType"</code>	DomainLimitsType
global-nfv-service-profile <i>optional</i>	Example : <code>["_csp-tssm_domain_id_global-nfv-service-profile"]</code>	<code>< domain{id}_global-nfv-service-profile ></code> array

Name	Description	Schema
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
namespace <i>optional</i>	Example : ["[csp-tssm_domain_id_namespace]"]	< domain{id}_namespace > array
nfv-service-profile <i>optional</i>	Example : ["[csp-tssm_domain_id_nfv-service-profile]"]	< domain{id}_nfv-service-profile > array
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pop <i>optional</i>	Example : ["[csp-tssm_domain_id_pop]"]	< domain{id}_pop > array
project <i>optional</i>	Example : ["[csp-tssm_domain_id_project]"]	< domain{id}_project > array
resource-pool <i>optional</i>	Example : ["[csp-tssm_domain_id_resource-pool]"]	< domain{id}_resource-pool > array

get-nsd-package-details-input

Name	Description	Schema
input <i>optional</i>	Example : "GetNsdPackageDetails_InputType"	GetNsdPackageDetails_InputType

get-nsd-package-details-output

Name	Description	Schema
output <i>optional</i>	Example : "GetNsdPackageDetails_OutputType"	GetNsdPackageDetails_OutputType

get-pnf-abstract-config-input

Name	Description	Schema
input <i>optional</i>	Example : "GetPnfAbstractConfig_InputType"	GetPnfAbstractConfig_InputType

get-pnf-abstract-config-output

Name	Description	Schema
output <i>optional</i>	Example : "GetPnfAbstractConfig_OutputType"	GetPnfAbstractConfig_OutputType

get-service-context-input

Name	Description	Schema
input <i>optional</i>	Example : "GetServiceContext_InputType"	GetServiceContext_InputType

get-service-context-output

Name	Description	Schema
output <i>optional</i>	Example : "GetServiceContext_OutputType"	GetServiceContext_OutputType

get-service-instance-details-input

Name	Description	Schema
input <i>optional</i>	Example : "GetServiceInstanceDetails_InputType"	GetServiceInstanceDetails_InputType

get-service-instance-details-output

Name	Description	Schema
output <i>optional</i>	Example : "GetServiceInstanceDetails_OutputType"	GetServiceInstanceDetails_OutputType

get-service-profiles-input

Name	Description	Schema
input <i>optional</i>	Example : "GetServiceProfiles_InputType"	GetServiceProfiles_InputType

get-service-profiles-output

Name	Description	Schema
output <i>optional</i>	Example : "GetServiceProfiles_OutputType"	GetServiceProfiles_OutputType

get-service-properties-input

Name	Description	Schema
input <i>optional</i>	Example : "GetServiceProperties_InputType"	GetServiceProperties_InputType

get-service-properties-output

Name	Description	Schema
output <i>optional</i>	Example : "GetServiceProperties_OutputType"	GetServiceProperties_OutputType

get-site-info-input

Name	Description	Schema
input <i>optional</i>	Example : "GetSiteInfo_InputType"	GetSiteInfo_InputType

get-site-info-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetSiteInfo_OutputType"</code>	GetSiteInfo_OutputType

get-supported-service-properties-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"GetSupportedServiceProperties_InputType"</code>	GetSupportedServiceProperties_InputType

get-supported-service-properties-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"GetSupportedServiceProperties_OutputType"</code>	GetSupportedServiceProperties_OutputType

global-nfv-service-profile

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

global-nfv-service-profile{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
nfv-service-profile <i>optional</i>	Example : <code>["_csp-tssm_global-nfv-service-profile_id_nfv-service-profile"]</code>	<code>< global-nfv-service-profile{id}_nfv-service-profile > array</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

global-system-config

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

global-system-config{id}

Name	Description	Schema
config-version <i>optional</i>	Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2

import-pop-input

Name	Description	Schema
input <i>optional</i>	Example : "ImportPop_InputType"	ImportPop_InputType

import-pop-output

Name	Description	Schema
output <i>optional</i>	Example : "ImportPop_OutputType"	ImportPop_OutputType

import-service-profile-input

Name	Description	Schema
input <i>optional</i>	Example : "ImportServiceProfile_InputType"	ImportServiceProfile_InputType

import-service-profile-output

Name	Description	Schema
output <i>optional</i>	Example : "ImportServiceProfile_OutputType"	ImportServiceProfile_OutputType

namespace

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

namespace{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType

Name	Description	Schema
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

nfv-service-instance

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

nfv-service-instance{id}

Name	Description	Schema
app_point <i>optional</i>	Application point. Example : <code>"NfvServiceInstanceAppPointType"</code>	NfvServiceInstanceAppPointType
config_input <i>optional</i>	User input of service configuration committed in JSM or CCPE. Example : <code>"NfvServiceInstanceConfigInputType"</code>	NfvServiceInstanceConfigInputType
display-name <i>optional</i>	Example : <code>"string"</code>	string
final_props <i>optional</i>	Final properties used in the committed service configuration. Example : <code>"NfvServiceInstanceFinalPropsType"</code>	NfvServiceInstanceFinalPropsType
flavour <i>optional</i>	NFV service instance flavor. Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
job_info <i>optional</i>	TBD: reserved for future use. Example : <code>"NfvServiceInstanceJobInfoType"</code>	NfvServiceInstanceJobInfoType
jsm_state <i>optional</i>	The JSM service state. Example : <code>"NfvServiceInstanceJsmStateType"</code>	NfvServiceInstanceJsmStateType
nfv-service-profile <i>optional</i>	Example : <code>["_csp-tssm_nfv-service-instance_id_nfv-service-profile"]</code>	< nfv-service-instance{id}_nfv-service-profile > array
nfv_nsid <i>optional</i>	NS instance UUID of the virtual network service in JSM. Example : <code>"YangUuidType"</code>	YangUuidType
pending_attributes <i>optional</i>	Pending attributes. Example : <code>"NfvServiceInstancePendingAttributesType"</code>	NfvServiceInstancePendingAttributesType
pending_config_input <i>optional</i>	User config input in pending configuration request. Example : <code>"NfvServiceInstancePendingConfigInputType"</code>	NfvServiceInstancePendingConfigInputType
pending_final_props <i>optional</i>	Final properties used in pending configuration request. Example : <code>"NfvServiceInstancePendingFinalPropsType"</code>	NfvServiceInstancePendingFinalPropsType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2
progress <i>optional</i>	Percentage of progress completed. Example : <code>"ProgressType"</code>	ProgressType

Name	Description	Schema
state <i>optional</i>	The service state. Example : "NfvServiceInstanceStateType"	NfvServiceInstanceStateType
user_name <i>optional</i>	Name of user instantiating service. Example : "string"	string

nfv-service-profile

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

nfv-service-profile{id}

Name	Description	Schema
allowed_app_points <i>optional</i>	Applicable service application points. Example : "NfvServiceProfileAllowedAppPointsType"	NfvServiceProfileAllowedAppPointsType
category <i>optional</i>	The category to which the service belongs, like Security or Routing. Example : "NfvServiceProfileCategoryType"	NfvServiceProfileCategoryType
ccpe_api_meta <i>optional</i>	CCPE meta-data, currently unused. Example : "NfvServiceProfileCcpeApiMetaType"	NfvServiceProfileCcpeApiMetaType
customized_models <i>optional</i>	Customized models. Example : "NfvServiceProfileCustomizedModelsType"	NfvServiceProfileCustomizedModelsType
deployment_flag <i>optional</i>	Type of deployment Example : "NfvServiceProfileDeploymentFlagType"	NfvServiceProfileDeploymentFlagType
description <i>optional</i>	Description of the service that can be shown to end user. Example : "string"	string
display-name <i>optional</i>	Example : "string"	string
flavour <i>optional</i>	NFV service flavor. Example : "string"	string
functions <i>optional</i>	Functions implemented by the service (received from NSD package or manually entered for CCPE services). Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
nsd_package <i>optional</i>	The UUID of NSD package of this service profile. Example : "LeafrefType"	LeafrefType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
properties <i>optional</i>	Service profile level provisioning properties in JSON format. Example : "NfvServiceProfilePropertiesType"	NfvServiceProfilePropertiesType

Name	Description	Schema
rendering_properties <i>optional</i>	UI rendering properties. Example : <code>"string"</code>	string
status <i>optional</i>	Status of the service profile. Example : <code>"NfvServiceProfileStatusType"</code>	NfvServiceProfileStatusType
target_type <i>optional</i>	target type Example : <code>"NfvServiceProfileTargetTypeType"</code>	NfvServiceProfileTargetTypeType

onboard-tenant-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"OnboardTenant_InputType"</code>	OnboardTenant_InputType

onboard-tenant-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"OnboardTenant_OutputType"</code>	OnboardTenant_OutputType

pnf-configure-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"PnfConfigure_InputType"</code>	PnfConfigure_InputType

pnf-configure-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"PnfConfigure_OutputType"</code>	PnfConfigure_OutputType

pop

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

pop{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType

Name	Description	Schema
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>
properties <i>optional</i>	POP level provisioning properties in JSON format. Example : <code>"PopPropertiesType"</code>	<code>PopPropertiesType</code>

project

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

project{id}

Name	Description	Schema
api-access-list <i>optional</i>	Example : <code>["_csp-tssm_project_id_api-access-list"]</code>	<code>< project{id}_api-access-list > array</code>
customer <i>optional</i>	Example : <code>["_csp-tssm_project_id_customer"]</code>	<code>< project{id}_customer > array</code>
display-name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	<code>IdPermsType</code>
namespace <i>optional</i>	Example : <code>["_csp-tssm_project_id_namespace"]</code>	<code>< project{id}_namespace > array</code>
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	<code>PermType2</code>
quota <i>optional</i>	Example : <code>"QuotaType"</code>	<code>QuotaType</code>

property-meta

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>
uuid <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

property-meta{id}

Name	Description	Schema
description <i>optional</i>	A string property description. Example : <code>"string"</code>	<code>string</code>
display-name <i>optional</i>	Example : <code>"string"</code>	<code>string</code>

Name	Description	Schema
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
value_syntax <i>optional</i>	The property value type; either a built-in YANG type or a derived type. Example : "string"	string

recall-device-input

Name	Description	Schema
input <i>optional</i>	Example : "RecallDevice_InputType"	RecallDevice_InputType

recall-device-output

Name	Description	Schema
output <i>optional</i>	Example : "RecallDevice_OutputType"	RecallDevice_OutputType

recall-devices-input

Name	Description	Schema
input <i>optional</i>	Example : "RecallDevices_InputType"	RecallDevices_InputType

recall-devices-output

Name	Description	Schema
output <i>optional</i>	Example : "RecallDevices_OutputType"	RecallDevices_OutputType

remove-pop-input

Name	Description	Schema
input <i>optional</i>	Example : "RemovePop_InputType"	RemovePop_InputType

remove-pop-output

Name	Description	Schema
output <i>optional</i>	Example : "RemovePop_OutputType"	RemovePop_OutputType

remove-site-input

Name	Description	Schema
input <i>optional</i>	Example : "RemoveSite_InputType"	RemoveSite_InputType

remove-site-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"RemoveSite_OutputType"</code>	RemoveSite_OutputType

resource-pool

Name	Description	Schema
fq_name <i>optional</i>	Example : <code>"string"</code>	string
uuid <i>optional</i>	Example : <code>"string"</code>	string

resource-pool{id}

Name	Description	Schema
display-name <i>optional</i>	Example : <code>"string"</code>	string
id-perms <i>optional</i>	Example : <code>"IdPermsType"</code>	IdPermsType
nfv_resource_pool_id <i>optional</i>	NFV resource pool UUID. Example : <code>"YangUuidType"</code>	YangUuidType
perms2 <i>optional</i>	Example : <code>"PermType2"</code>	PermType2

service-configure-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ServiceConfigure_InputType"</code>	ServiceConfigure_InputType

service-configure-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ServiceConfigure_OutputType"</code>	ServiceConfigure_OutputType

service-instantiate-and-start-input

Name	Description	Schema
input <i>optional</i>	Example : <code>"ServiceInstantiateAndStart_InputType"</code>	ServiceInstantiateAndStart_InputType

service-instantiate-and-start-output

Name	Description	Schema
output <i>optional</i>	Example : <code>"ServiceInstantiateAndStart_OutputType"</code>	ServiceInstantiateAndStart_OutputType

service-terminate-input

Name	Description	Schema
input <i>optional</i>	Example : "ServiceTerminate_InputType"	ServiceTerminate_InputType

service-terminate-output

Name	Description	Schema
output <i>optional</i>	Example : "ServiceTerminate_OutputType"	ServiceTerminate_OutputType

service-update-input

Name	Description	Schema
input <i>optional</i>	Example : "ServiceUpdate_InputType"	ServiceUpdate_InputType

service-update-output

Name	Description	Schema
output <i>optional</i>	Example : "ServiceUpdate_OutputType"	ServiceUpdate_OutputType

set-service-properties-input

Name	Description	Schema
input <i>optional</i>	Example : "SetServiceProperties_InputType"	SetServiceProperties_InputType

set-service-properties-output

Name	Description	Schema
output <i>optional</i>	Example : "SetServiceProperties_OutputType"	SetServiceProperties_OutputType

ship-device-input

Name	Description	Schema
input <i>optional</i>	Example : "ShipDevice_InputType"	ShipDevice_InputType

ship-device-output

Name	Description	Schema
output <i>optional</i>	Example : "ShipDevice_OutputType"	ShipDevice_OutputType

site

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string
uuid <i>optional</i>	Example : "string"	string

site-activate-input

Name	Description	Schema
input <i>optional</i>	Example : "SiteActivate_InputType"	SiteActivate_InputType

site-activate-output

Name	Description	Schema
output <i>optional</i>	Example : "SiteActivate_OutputType"	SiteActivate_OutputType

site-deactivate-input

Name	Description	Schema
input <i>optional</i>	Example : "SiteDeactivate_InputType"	SiteDeactivate_InputType

site-deactivate-output

Name	Description	Schema
output <i>optional</i>	Example : "SiteDeactivate_OutputType"	SiteDeactivate_OutputType

site{id}

Name	Description	Schema
device_template_id <i>optional</i>	Device deployment template UUID for the site. Example : "YangUuidType"	YangUuidType
display-name <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
ipam_scope <i>optional</i>	IPAM scope. Example : "SiteIpamScopeType"	SiteIpamScopeType
perms2 <i>optional</i>	Example : "PermType2"	PermType2
pnfid <i>optional</i>	Site ID created by ccpe legacy portal. This is not visible to customer admin. Example : 0	integer(int32)

Name	Description	Schema
pop <i>optional</i>	Example : ["[_csp-tssm_site_id_pop]"]	< site{id}_pop > array
properties <i>optional</i>	Site provisioning properties in JSON format. This is not visible to customer admin. Example : "SitePropertiesType"	SitePropertiesType
resource-pool <i>optional</i>	Example : ["[_csp-tssm_site_id_resource-pool]"]	< site{id}_resource-pool > array
site_type <i>optional</i>	Topology deployment type. Example : "SiteSiteTypeType"	SiteSiteTypeType
state <i>optional</i>	The site state to keep track of whether all services deployment completed. Example : "SiteStateType"	SiteStateType
topology_site_id <i>optional</i>	Site UUID in topology. Example : "YangUuidType"	YangUuidType
user_defined_properties <i>optional</i>	Optional. Site-level context user specified properties (non-csp-related). Intended for use by 3rd parties. Example : "SiteUserDefinedPropertiesType"	SiteUserDefinedPropertiesType

start-device-activation-input

Name	Description	Schema
input <i>optional</i>	Example : "StartDeviceActivation_InputType"	StartDeviceActivation_InputType

start-device-activation-output

Name	Description	Schema
output <i>optional</i>	Example : "StartDeviceActivation_OutputType"	StartDeviceActivation_OutputType

sync-service-instance-input

Name	Description	Schema
input <i>optional</i>	Example : "SyncServiceInstance_InputType"	SyncServiceInstance_InputType

sync-service-instance-output

Name	Description	Schema
output <i>optional</i>	Example : "SyncServiceInstance_OutputType"	SyncServiceInstance_OutputType

yang-schema

Name	Description	Schema
fq_name <i>optional</i>	Example : "string"	string

Name	Description	Schema
uuid <i>optional</i>	Example : "string"	string

yang-schema{id}

Name	Description	Schema
display-name <i>optional</i>	Example : "string"	string
es-schema <i>optional</i>	Example : "string"	string
id-perms <i>optional</i>	Example : "IdPermsType"	IdPermsType
json-schema <i>optional</i>	Example : "string"	string
module-name <i>optional</i>	Example : "string"	string
namespace <i>optional</i>	Example : "string"	string
perms2 <i>optional</i>	Example : "PermType2"	PermType2
revision <i>optional</i>	Example : "string"	string
yin-schema <i>optional</i>	Example : "string"	string