



Cisco Cloud Native Broadband Router Operations Hub REST API Guide, Release 20.3

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Operations Hub

Authentication API

Version: 1.0

Security

BasicAuth

basic	<i>Basic</i>
-------	--------------

/loglevel

GET

Summary Get HM Auth Current LogLevel

Description Get HM Auth Current LogLevel

Responses

Code	Description	Schema
200	OK	auth.LogLevel

Security

Security	Schema	Scopes
AuthBearerHeader		

PUT**Summary** Set HM Auth LogLevel**Description** Set HM Auth LogLevel**Parameters**

Name	Located in	Description	Required	Schema
LogLevel	body	Log Level	Yes	LogLevel

Responses

Code	Description	Schema
200	OK	auth.LogLevel
400	Bad Request	string

Security

Security	Schema	Scopes
AuthBearerHeader		

/v1/token**POST****Summary** Generate an API token if user is valid**Description** Generate an API token**Responses**

Code	Description	Schema
201	Created	auth.TokenGenInfo
400	Bad Request	string

Security

Security	Schema	Scopes
BasicAuth		

DELETE**Summary** Delete access token from DB**Description** Delete access token from DB**Responses**

Code	Description	Schema
200	OK	string
400	Bad Request	string

Security

Security	Schema	Scopes
AuthBearerHeader		

/v1/token/fresh**POST****Summary** Refresh access and fresh token**Description** Refresh access and fresh token**Parameters**

Name	Located in	Description	Required	Schema
Token	body	Token	Yes	auth.TokenRefreshReqInfo

Responses

Code	Description	Schema
200	OK	auth.TokenGenInfo
400	Bad Request	string

Security

Security	Schema	Scopes
AuthBearerHeader		

/v1/token/validation**POST****Summary** Validate access token**Description** Check if the access token is valid**Responses**

Code	Description	Schema
200	OK	string
400	Bad Request	string

Security

Security	Schema	Scopes
AuthBearerHeader		

Models**auth.LogLevel**

Name	Type	Description	Required
Log Level	string		No

auth.TokenGenInfo

Name	Type	Description	Required
access_token	string		No
refresh_token	string		No
refresh_token_expire	integer		No
token_type	string		No

auth.TokenRefreshReqInfo

Name	Type	Description	Required
access_token	string		No
refresh_token	string		No

Operations Hub cnBR Management API

Version: 1.0

/loglevel

GET

Summary Get HM Manager Current LogLevel

Description Get HM Manager Current LogLevel

Responses

Code	Description	Schema
200	OK	model.LogLevel

PUT

Summary Set HM Manager LogLevel

Description Set HM Manager LogLevel

Parameters

Name	Located in	Description	Required	Schema
LogLevel	body	Log Level	Yes	model.LogLevel

Responses

Code	Description	Schema
200	OK	model.LogLevel
400	Bad Request	string

/v1/cable-modems**GET****Summary** Get all Cable Modems information**Description** Get all Cable Modems information**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	query	CMTS	Yes	string
state	query	filter modems state	No	string
format	query	output format	Yes	string

Responses

Code	Description	Schema
200	OK	model.SCMInfo
400	Bad Request	string
404	Not Found	string

PUT**Summary** Reset or Delete Modem from HM**Description** Reset or Delete Modem from HM**Parameters**

Name	Located in	Description	Required	Schema
ModemAction	body	Modem Action	Yes	model.ModemAction

Responses

Code	Description	Schema
200	ok	string
400	Bad Request	string

/v1/cable-modems/flap**GET****Summary** ShowCableModem Flap List from HM**Description** Show Cable Modem Flap List from HM**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	query	CMTS	Yes	string
format	query	output format	Yes	string

Responses

Code	Description	Schema
200	ok	string
400	Bad Request	string

/v1/cable-modems/phy**GET****Summary** ShowCableModem PHY from HM**Description** Show Cable Modem Phy from HM**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	query	CMTS	Yes	string
format	query	output format	Yes	string

Responses

Code	Description	Schema
200	ok	string
400	Bad Request	string

/v1/cable-modems/statistics**GET****Summary** Get Modem Statistics from HM**Description** Get all the monitored CMTSs' Modem statistics from HM**Responses**

Code	Description	Schema
200	OK	model.CmStats
400	Bad Request	string

/v1/cable-modems/{mac}**GET****Summary** Get one Cable Modem information**Description** Get one Cable Modem information**Parameters**

Name	Located in	Description	Required	Schema
mac	path	ModemMac	Yes	string
kind	query	output type	No	string

Responses

Code	Description	Schema
200	OK	model.ModemBasicInfo
400	Bad Request	string
404	Not Found	string

/v1/cable-modems/{mac}/cpes**GET****Summary** GetModemCpeInfo from HM**Description** Get Modem CPE Info from HM**Parameters**

Name	Located in	Description	Required	Schema
mac	path	Modem Mac	Yes	string

Responses

Code	Description	Schema
200	ok	string
400	Bad Request	string

DELETE**Summary** HttpDeleteModemCpes from HM**Description** Delete Modem CPE Info from HM**Parameters**

Name	Located in	Description	Required	Schema
mac	path	Modem Mac	Yes	string
cpe-mac	query	CPE Mac List, split with ,	No	string

Responses

Code	Description	Schema
200	ok	string
400	Bad Request	string

/v1/cable-modems/{mac}/dbc**GET****Summary** Get Modem Dbc Info from HM**Description** Get Modem Dbc Info from HM**Parameters**

Name	Located in	Description	Required	Schema
mac	path	ModemMac	Yes	string
kind	query	output type	Yes	string
limit	query	limit number for events	No	integer

Responses

Code	Description	Schema
200	ok	string
400	Bad Request	string

/v1/cable-modems/{mac}/debug**GET****Summary** Get Debug Information for any given Cable Modem using macidc**Description** Get cable modem's debug information from cnBr by invoking ida api's**Parameters**

Name	Located in	Description	Required	Schema
mac	path	ModemMac	Yes	string

Responses

Code	Description	Schema
200	OK	responseSlice
400	Bad Request	string
404	Not Found	string
500	CM Debug request failed	string

/v1/cable-modems/{mac}/service-flows**GET****Summary** Get cable modem's Service Flows information**Description** Get cable modem's Service Flows information**Parameters**

Name	Located in	Description	Required	Schema
mac	path	ModemMac	Yes	string

Responses

Code	Description	Schema
200	OK	model.SfPerModemList
400	Bad Request	string
404	Not Found	string

/v1/cmts**GET****Summary** Get all CMTS Information**Description** Get all CMTS Information**Parameters**

Name	Located in	Description	Required	Schema
fields	query	give information based on the fields	No	string

Responses

Code	Description	Schema
200	OK	model.CmtsDetailInfoEntries
400	Bad Request	string
404	Not Found	string

POST

Summary Add new CMTSs to the HM

Description Add new CMTSs to the HM

Parameters

Name	Located in	Description	Required	Schema
Cmts	body	CMTS	Yes	model.NewCmtsInfo

Responses

Code	Description	Schema
200	OK	model.CmtsBasicInfo
400	Bad Request	model.Response
403	Forbidden	model.Response
500	Internal error	model.Response

DELETE

Summary Delete All CMTSs from the HM

Description Delete All CMTSs from the HM

Responses

Code	Description	Schema
200	OK	model.CmtsEntry
400	Bad Request	string

/v1/cmts/mdcmmsg**GET**

Summary Get all CMTS details

Description Fetch the CMTS list as a DAG that contains all SG , with MD/CmSG/FN details, associated to each CMTS

Responses

Code	Description	Schema
200	OK	model.CmtsResponse
400	Bad Request	model.Response

/v1/cmts/refresh**POST****Summary** Refresh All CMTS**Description** Trigger CMTS(s) to send the telemetry**Responses**

Code	Description	Schema
200	OK	string
500	Internal Server Error	string

/v1/cmts/version**GET****Summary** Get All cnBR Version**Description** HttpGetcnBRVersion api fetches the versions of the cnBR related components using restconf.ccmts-infra-ops-center for all cnBRs**Responses**

Code	Description	Schema
200	OK	model.ResponseRootObject

/v1/cmts/{cmts-id}**GET****Summary** Get one CMTS information**Description** Get one CMTS information**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string
fields	query	give information on the fields	No	string

Responses

Code	Description	Schema
200	OK	model.CmtsBasicInfo
400	Bad Request	string
404	Not Found	string

PUT**Summary** Edit CMTS credentials to the HM**Description** Edit CMTS credentials to the HM**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string
Cmnts	body	CMTS credentials	Yes	model.NewCmtsCreds

Responses

Code	Description	Schema
200	OK	model.Response
400	Bad Request	model.Response
500	Internal error	model.Response

DELETE**Summary** Delete one CMTS from the HM**Description** Delete one CMTS from the HM**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string

Responses

Code	Description	Schema
200	OK	model.CmtsEntry
404	Not found	string

/v1/cmts/{cmts-id}/configs**GET****Summary** Get CMTS Config**Description** Get CMTS Config**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string
type	query	config type	No	string

Responses

Code	Description	Schema
200	configuration	string
500	Internal Server Error	string

/v1/cmts/{cmts-id}/health**POST****Summary** Update CMTS Health**Description** Update CMTS healthy status**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string

Responses

Code	Description	Schema
200	OK	string
500	Internal Server Error	string

/v1/cmts/{cmts-id}/interfaces**GET****Summary** Get CMTS's Interfaces information**Description** Get CMTS's Interfaces information**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string

Responses

Code	Description	Schema
200	OK	model.IntfInfoList
400	Bad Request	string
404	Not Found	string

/v1/cmts/{cmts-id}/modems**GET****Summary** Get CMTS's Cable Modem List**Description** Get CMTS's Cable Modem List**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string

Responses

Code	Description	Schema
200	OK	model.CmSgList
400	Bad Request	string
404	Not Found	string

/v1/cmts/{cmts-id}/refresh**POST****Summary** Refresh CMTS**Description** Trigger CMTS to send the telemetry**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string

Responses

Code	Description	Schema
200	OK	string
500	Internal Server Error	string

/v1/cmts/{cmts-id}/version**GET****Summary** Get cnBR Version**Description** HttpGetcnBRVersion api fetches the versions of the cnBR related components using restconf.ccmts-infra-ops-center for one cnBR**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	CMTS	Yes	string

Responses

Code	Description	Schema
200	OK	model.ResponseRootObject

/v1/collector/file/{tid}**GET****Summary** Get the tar.gz file which includes collected infomation**Description** Get the tar.gz file which includes collected infomation**Parameters**

Name	Located in	Description	Required	Schema
tid	path	tid of the collection	Yes	string

Responses

Code	Description	Schema
200	OK	string
500	Internal Server Error	string

DELETE**Summary** Delete the tar.gz file which includes collected infomation as well as its record in database**Description** Get the tar.gz file which includes collected infomation as well as its record in database**Parameters**

Name	Located in	Description	Required	Schema
tid	path	tid of the collection	Yes	string

Responses

Code	Description	Schema
200	OK	string
500	Internal Server Error	string

/v1/collector/info**PUT****Summary** Collector Debug Info**Description** Collector Debug Info**Parameters**

Name	Located in	Description	Required	Schema
CollectorInfo	body	Collector Info	Yes	handler.CollectorInfo

Responses

Code	Description	Schema
200	ok	string
400	Bad Request	string

/v1/collector/snapshot**/v1/opshub/version****GET****Summary** Get Opshub Version**Description** HttpGetOpshubversion api fetches the version of the Opshub related components**Responses**

Code	Description	Schema
200	OK	model.ResponseRootObject

/v1/service-flows**GET****Summary** Get CMTS's Service Flows list**Description** Get CMTS's Service Flows list**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	query	CMTS	Yes	string

Responses

Code	Description	Schema
200	OK	model.ServiceFlowList
400	Bad Request	string
404	Not Found	string

/v1/service-flows/{sf-id}**GET****Summary** Get one Service Flow**Description** Get one Service Flow**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	query	CMTS	Yes	string
sg-id	query	Service Group	Yes	integer
md-id	query	MAC Domain	Yes	integer
sf-id	path	Service Flow	Yes	integer

Responses

Code	Description	Schema
200	OK	model.SfInfoVerb
400	Bad Request	string
404	Not Found	string

Models

handler.CollectorInfo

Name	Type	Description	Required
from	string		No
info_source	[handler.CollectorTypeInfo]		No
to	string		No
user	string		No

handler.CollectorTypeInfo

Name	Type	Description	Required
id	string		No
source	string		No
type	string		No

model.CmSg

Name	Type	Description	Required
mdCmSgId	integer		No
mdDsSg	model.DsSg		No
mdUsSg	model.UsSg		No

model.CmSgInfo

Name	Type	Description	Required
modems-list	[string]		No
sg-id	integer		No

model.CmSgList

Name	Type	Description	Required
cmts-id	string		No
sg-id-list	[model.CmSgInfo]		No

model.CmSgStatsInfo

Name	Type	Description	Required
init	integer		No
offline	integer		No
online	integer		No
sg-id	integer		No

model.CmStats

Name	Type	Description	Required
cmts-modems-stats	[model.CmStatsItem]		No

model.CmStatsItem

Name	Type	Description	Required
cmts-id	string		No
sg-stats	[model.CmSgStatsInfo]		No

model.CmtsBasicInfo

Name	Type	Description	Required
access-token	string	CmtsToken string json:"cmts-token"	No
cluster-numeric-id	integer		No
cmts-id	string		No
cmts-name	string		No
ingress-host-name	string		No
namespace	string		No
password	string		No
refresh-token	string		No
refresh-token-expire	integer		No
status	string		No
token-refresh-status	string		No
username	string		No

model.CmtsDetailInfo

Name	Type	Description	Required
access-token	string		No
cmts-id	string		No
cmts-name	string		No
description	string	CmtsToken string json:"cmts-token"	No

Name	Type	Description	Required
docsis-base-cap	string		No
ingress-host-name	string		No
namespace	string		No
password	string		No
refresh-token	string		No
refresh-token-expire	integer		No
status	string		No
token-refresh-status	string		No
username	string		No

model.CmtsDetailInfoEntries

Name	Type	Description	Required
cmts-list	[model.CmtsDetailInfo]		No

model.CmtsEntry

Name	Type	Description	Required
cmts-id	[string]		No

model.CmtsResponse

Name	Type	Description	Required
cmts	[model.MdCmSg]		No

model.ComponentsObject

Name	Type	Description	Required
name	string		No
version	string		No

model.DsSg

Name	Type	Description	Required
dsChanSet	[integer]		No
mdDsSgId	integer		No

model.FiberNode

Name	Type	Description	Required
fnId	integer		No
mdCmSgs	[model.CmSg]		No

model.IntfInfo

Name	Type	Description	Required
if-in-octets	integer		No
if-mac	string		No
if-name	string		No
if-out-octets	integer		No
if-stack-status	string		No
if-type	string		No

model.IntfInfoList

Name	Type	Description	Required
cluster-id	string		No
interface-list	[model.IntfInfo]		No

model.LogLevel

Name	Type	Description	Required
Log Level	string		No

model.MACDomain

Name	Type	Description	Required
fiber-nodes	[model.FiberNode]		No
mdId	integer		No

model.MdCmSg

Name	Type	Description	Required
cmts-id	string		No
service-groups	[model.ServiceGroup]		No

model.ModemAction

Name	Type	Description	Required
action	string		No
cmts-id	string		No
modems	[string]		No
sg-id	string		No

model.ModemBasicInfo

Name	Type	Description	Required
cpe-count	integer		No
errors-correctable(s)	integer		No
errors-uncorrectable(s)	integer		No
flap-count	integer		No
flap-time	string		No
good-codeword	integer		No
interface	string		No
ip-address	[string]		No
mac-address	string		No
mac-tate	string		No
mac-version	string		No
operation-version	string		No
primary-ds-sfid	integer		No
primary-sID	integer		No
primary-us-sfid	integer		No
provisioned-version	string		No
rcp-id	string		No
rcs-dcid	[integer]		No
reinit-reason	string		No
tcs-ucid	[integer]		No
timing-offset	integer		No

model.NewCmtsCreds

Name	Type	Description	Required
password	string		No
username	string		No

model.NewCmtsInfo

Name	Type	Description	Required
cmts-name	string		No
ingress-host-name	string		No
namespace	string		No
password	string		No
username	string		No

model.Response

Name	Type	Description	Required
message	string	<i>Example:</i> "message"	No

model.ResponseObject

Name	Type	Description	Required
cmtsid	string		No
components	[model.ComponentsObject]		No
name	string		No
version	string		No

model.ResponseRootObject

Name	Type	Description	Required
deployments	[model.ResponseObject]		No

model.SCMInfo

Name	Type	Description	Required
cpe-num	string		No
dual-stack	string		No
interface	string		No
ip-addr	string		No
mac-state	string		No
modem-mac	string		No
prim-sid	string		No
rx-pwr(dBmV)	string		No
timing-offset	string		No

model.ServiceFlowList

Name	Type	Description	Required
cmts-id	string		No
service-flow-list	[model.SfInfo]		No

model.ServiceGroup

Name	Type	Description	Required
mac-domains	[model.MACDomain]		No
sgId	integer		No

model.SfInfo

Name	Type	Description	Required
dir	string		No
id	integer		No
mac	string		No
mac-domain-id	integer		No
service-group-id	integer		No
state	string		No
type	string		No

model.SfInfoVerb

Name	Type	Description	Required
byte-cnt	integer		No
clusterId	string		No
dir	string		No
id	integer		No
mac	string		No
mdId	integer		No
pkt-cnt	integer		No
sgId	integer		No
state	string		No
type	string		No

model.SfPerModem

Name	Type	Description	Required
byte-cnt	integer		No
dir	string		No
id	integer		No
pkt-cnt	integer		No
state	string		No
type	string		No

model.SfPerModemList

Name	Type	Description	Required
mac	string		No
service-flow-list	[model.SfPerModem]		No

model.UsSg

Name	Type	Description	Required
mdUsSgId	integer		No
usChanSet	[integer]		No

Operations Hub Configurator API

Version: 1.0

/v1/cmts/config/{cmts-id}

GET

Summary Get cnBR-Core All Configuration

Description Get cnBR-Core all configuration

Parameters

Name	Located in	Description	Required	Schema
cmts-id	path	cnBR-Core Cluster ID	Yes	string

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

PUT

Summary Update cnBR-Core All Configuration

Description Update cnBR-Core all configuration

Parameters

Name	Located in	Description	Required	Schema
cmts-id	path	cnBR-Core Cluster ID	Yes	string
Configuration	body	Cluster Configuration	Yes	model.CnBRConfig

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

/v1/cmts/{cmts-id}/config/global**GET****Summary** Get cnBR-Core Global Configuration**Description** Get cnBR-Core Global Configuration**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	cnBR-Core Cluster ID	Yes	string
type	query	Global Configuration Type	Yes	string

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

PUT**Summary** Update cnBR-Core Global Configuration**Description** Update cnBR-Core Global Configuration**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	cnBR-Core Cluster ID	Yes	string
type	query	Global Configuration Type	Yes	string
value	body	Global Configuration JSON Data	Yes	string

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

/v1/cmts/{cmts-id}/config/service-groups/{service-group-id}

GET

Summary Get cnBR-Core SG Configuration

Description Get cnBR-Core Service Group Configuration

Parameters

Name	Located in	Description	Required	Schema
cmts-id	path	cnBR-Core Cluster ID	Yes	string
service-group-id	path	Service Group ID	Yes	integer

Responses

Code	Description	Schema
200	OK	models.Sg
400	Bad Request	string

/v1/cmts/{cmts-id}/service-group-ids

GET

Summary Get cnBR-Core SG ID List

Description Get cnBR-Core Service Group List in cnBR-Core

Parameters

Name	Located in	Description	Required	Schema
cmts-id	path	cnBR-Core Cluster ID	Yes	string

Responses

Code	Description	Schema
200	OK	model.ServiceGroupList
400	Bad Request	string

/v1/templates**GET****Summary** Get All Configuration Template**Description** Get all configuration template**Parameters**

Name	Located in	Description	Required	Schema
type	query	Template Type	No	string

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

POST**Summary** Add Configuration Template**Description** Add configuration template**Parameters**

Name	Located in	Description	Required	Schema
Template	body	Template	Yes	model.Template

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

/v1/templates/{template-name}

GET

Summary Get Configuration Template

Description Get configuration template

Parameters

Name	Located in	Description	Required	Schema
template-name	path	Template Name	Yes	string
type	query	Template Type	No	string

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

PUT

Summary Update Configuration Template

Description Update configuration template

Parameters

Name	Located in	Description	Required	Schema
template-name	path	Template Name	Yes	string
Template	body	Template	Yes	model.Template

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

DELETE

Summary Delete Configuration Template

Description Delete configuration template

Parameters

Name	Located in	Description	Required	Schema
template-name	path	Template Name	Yes	string

Responses

Code	Description	Schema
200	OK	string
400	Bad Request	string

Models

model.CnBRConfig

Name	Type	Description	Required
global	model.CnbrGlobalConfig		No
sgs	[model.CnbrSGConfig]		No

model.CnbrGlobalConfig

Name	Type	Description	Required
Spr	models.Spr		No
bgpagent	models.Bgpagent		No
cin	models.Cin		No
l2vpn	models.L2vpn		No
packetcable	models.Packetcable		No
pfgActive	models.PfgActive		No

Name	Type	Description	Required
pfgGroup	models.PfgGroup		No
ptp	models.Ptp		No
rip	models.Rip		No
sav	models.Sav		No
tftpProxy	models.TftpProxy		No
wiring	models.Wiring		No

model.CnbrSGConfig

Name	Type	Description	Required
sg-config	models.Sg		No
sgid	integer		No

model.ServiceGroupList

Name	Type	Description	Required
model.ServiceGroupList	array		

model.Template

Name	Type	Description	Required
description	string	<i>Example:</i> "My First Template Example"	No
json-data	string (json)	<i>Example:</i> "Template JSON Data"	No
name	string	<i>Example:</i> "MyFirstTemplate"	No
type	string	<i>Example:</i> "TEMPLATE-SG"	No

models.BackoffCfg

Name	Type	Description	Required
end	integer	end Maximum: 15 Minimum: 0	No
start	integer	start Maximum: 15 Minimum: 0	No

models.BgpNeighbor

Name	Type	Description	Required
address	string	address	No
asNumber	integer	as number Maximum: 65535 Minimum: 1	No
gateway	string	gateway	No
weight	integer	weight Maximum: 65535 Minimum: 1	No

models.Bgpagent

Name	Type	Description	Required
asNumber	integer	as number Required: true Maximum: 65535 Minimum: 1	No
ebgpMultihop	integer	ebgp multihop Required: true Maximum: 255 Minimum: 0	No
gracefulRestart	models.GracefulRestart	gracefulRestart Required: true	No
ifname	string	ifname Required: true Max Length: 255 Min Length: 1	No
neighbors	[models.BgpNeighbor]	neighbors Required: true	No

models.Cin

Name	Type	Description	Required
CinGwIp	string	cin gw Ip	No
CinGwIpv6	string	cin gw ipv6	No
CinGwWeight	integer	cin gw weight Maximum: 65535 Minimum: 1	No
SecondaryCinGwIp	string	secondary cin gw Ip	No
SecondaryCinGwIpv6	string	secondary cin gw ipv6	No
SecondaryCinGwWeight	integer	secondary cin gw weight Maximum: 65535 Minimum: 1	No

models.Dhcp

Name	Type	Description
adjCleanup	boolean	adj cleanup
arpGlean	boolean	arp glean

Name	Type	Description	Req
arpProxy	boolean	arp proxy	No
arpTimer	integer	arp timer Maximum: 1440 Minimum: 0	No
customDevice	string	custom device	No
dhcpIfname	string	dhcp ifname	No
dhcpServers	[string]	dhcp servers	No
dynamicSecret	boolean	dynamic secret	No
dynamicSecretExcModemList	[string]	dynamic secret exc modem list	No
dynamicSecretExcOUIList	[string]	dynamic secret exc o UI list	No
ipv4Giaddr	[string]	ipv4 giaddr	No
ipv4Lq	boolean	ipv4 lq	No
ipv4LqLeasetimer	integer	ipv4 lq leasetimer Maximum: 240 Minimum: 1	No
ipv6LinkAddr	[string]	ipv6 link addr	No
ipv6Lq	boolean	ipv6 lq	No
ipv6LqLeasetimer	integer	ipv6 lq leasetimer Maximum: 240 Minimum: 1	No
lqV4scope	[string]	lq v4scope	No
lqV6prefix	[string]	lq v6prefix	No
mobilityScopes	[string]	mobility scopes	No
ndGlean	boolean	nd glean	No
ndProxy	boolean	nd proxy	No
ndpTimer	integer	ndp timer Maximum: 1440 Minimum: 0	No
raInterval	integer	ra interval Maximum: 1800 Minimum: 4	No
relayModeV4	integer	relay mode v4 Maximum: 255 Minimum: 0	No
relayModeV6	integer	relay mode v6 Maximum: 255 Minimum: 0	No
relayPolicies	[models.DhcpRelayPolicy]	relay policies	No
v4Nets	[string]	v4 nets	No
v6Nets	[string]	v6 nets	No
vrouterBdiLla	string	vrouter bdi lla	No
vrouterBdiMac	string	vrouter bdi mac	No

[models.DhcpRelayPolicy](#)

Name	Type	Description	Required
deviceClass	string	device class Enum: [CM HOST MTA STB PS EROUTER DVA CUSTOM]	No
giAddr	string	gi addr	No
linkAddr	string	link addr	No
v4ServerIp	string	v4 server Ip	No
v6ServerIp	string	v6 server Ip	No

[models.DlmCfg](#)

Name	Type	Description	Required
interval	integer	interval Maximum: 420 Minimum: 1	No
updateMap	boolean	update map	No

models.Dot1qvc

Name	Type	Description	Required
modemMAC	string	modem m a c	No
vlanID	integer	vlan ID Maximum: 4095 Minimum: 2	No
vpnID	string	vpn ID Max Length: 255 Min Length: 1	No

models.DsCfg

Name	Type	Description	Required
annex	string	annex Enum: [AnnexA AnnexB AnnexC]	No
attributeMask	integer	attribute mask Maximum: 4.294967295e+09 Minimum: 0	No
frequency	integer	frequency Maximum: 1.794e+09 Minimum: 5.4e+07	No
idInSg	integer	id in sg Required: true	No
interleaver	string	interleaver Enum: [fecI8J16 fecI12J17 fecI16J8 fecI32J4 fecI64J2 fecI128J1 fecI128J2 fecI128J3 fecI128J4 fecI128J5 fecI128J6 fecI128J7 fecI128J8]	No
modulation	string	modulation Enum: [qam256 qam64]	No
powerAdjust	integer	power adjust Maximum: 6 Minimum: -8	No
rfMute	boolean	rf mute	No

models.DsCfgs

Name	Type	Description	Required
models.DsCfgs	array		

models.DsResilCfg

Name	Type	Description	Required
chCmCount	integer	ch cm count	No
chOfdmCmCount	integer	ch ofdm cm count	No
chOfdmPercent	integer	ch ofdm percent	No
chPercent	integer	ch percent	No
chStateEn	string	ch state en Enum: [true false]	No
dampenTime	integer	dampen time Minimum: 5	No
resilEn	string	resil en Enum: [true false]	No

models.DsgCfg

Name	Type	Description	Required
cfr	[models.DsgCfr]	cfr	No
chanList	[models.DsgChanList]	chan list	No
clientList	[models.DsgClientList]	client list	No
dseh	boolean	dseh	No
nameUpdateInterval	integer	name update interval	No
tg	[models.DsgTg]	tg	No
timer	[models.DsgTimer]	timer	No
tunnel	[models.DsgTunnel]	tunnel	No
vendorParam	[models.DsgVendorParam]	vendor param	No

models.DsgCfr

Name	Type	Description	Required
destIp	string	dest Ip	No
destPortEnd	integer	dest port end	No
destPortStart	integer	dest port start	No
enable	boolean	enable	No
id	integer	id	No
priority	integer	priority	No
srcIp	string	src Ip	No
srcIpMask	string	src Ip mask	No
srcPortEnd	integer	src port end	No
srcPortStart	integer	src port start	No

models.DsgChan

Name	Type	Description	Required
freq	integer	freq Maximum: 1e+09 Minimum: 1e+08	No
id	integer	id	No

models.DsgChanList

Name	Type	Description	Required
chans	[models.DsgChan]	chans	No
id	integer	id	No

models.DsgClient

Name	Type	Description	Required
applicationId	string	application Id	No
broadcast	string	broadcast	No
caSystemId	string	ca system Id	No
id	integer	id	No
macAddr	[string]	mac addr	No
vendorParam	integer	vendor param	No

models.DsgClientList

Name	Type	Description	Required
clients	[models.DsgClient]	clients	No
id	integer	id	No

models.DsgTg

Name	Type	Description	Required
id	integer	id	No
tunnel	[integer]	tunnel	No

models.DsgTimer

Name	Type	Description	Required
id	integer	id	No
timeout	[integer]	timeout	No

models.DsgTunnel

Name	Type	Description	Required
cfr	[integer]	cfr	No
clientList	integer	client list	No
id	integer	id	No
macAddr	string	mac addr	No

models.DsgVendorParam

Name	Type	Description	Required
id	integer	id	No
vendor	[models.VendorCfg]	vendor	No

models.GracefulRestart

Name	Type	Description	Required
enable	boolean	enable	No
restartTime	integer	restart time Maximum: 3600 Minimum: 1	No
stalePathTime	integer	stale path time Maximum: 3600 Minimum: 1	No

models.IcpiCfg

Name	Type	Description	Required
icpiPerCausePuntCfgList	IcpiPerCausePuntCfgList	icpi per cause punt cfg list	No
		els.IcpiPerCausePuntCfgList	
]	

models.IcpiPerCausePuntCfg

Name	Type	Description	Required
MaxBurst	integer	max burst	No
MaxRate	integer	max rate	No

models.IcpiPerCausePuntCfgList

Name	Type	Description	Required
CauseId icpiPerCausePuntCfg	integer models.IcipiPerCausePuntCfg	cause Id icpi per cause punt cfg	No No

models.L2vpn

Name	Type	Description	Required
dot1qVcMap	[models.Dot1qvc]	dot1q vc map	No
mplsVcMap	[models.Mplsvc]	mpls vc map	No
mplsVlanRangeSg	[models.Mplsvlansg]	mpls vlan range sg	No
spRouterStat	[models.Sprstat]	sp router stat	No

models.Layer3Cfg

Name	Type	Description	Required
sgGWMac	string	sg g w mac	No
sgIpv4	string	sg Ipv4	No
sgIpv6	string	sg Ipv6	No
sgMac	string	sg mac	No
sgPeerIpv4	string	sg peer Ipv4	No
sgPeerIpv6	string	sg peer Ipv6	No

models.MapAdvanceCfg

Name	Type	Description	Required
advanceTime	integer	advance time Maximum: 45000 Minimum: 100	No
mode	string	mode Enum: [static dynamic]	No
safetyFactor	integer	safety factor Maximum: 1500 Minimum: 300	No

models.MapCtrlCfg

Name	Type	Description	Required
mapPgiePaddingEna	boolean	map pgie padding ena Required: true	No

models.McastCfg

Name	Type	Description	Required
mdfDisable	[string]	mdf disable	No
mdfOverride	boolean	mdf override	No

models.MdCfg

Name	Type	Description	Required
adminState	string	admin state	No
cmInitChanTimeout	integer	cm init chan timeout Maximum: 65535 Minimum: 1	No
dataBackoff	models.BackoffCfg	data backoff	No
disableDocsis31	boolean	disable docsis31	No
disableMrcMode	boolean	disable mrc mode	No
disableMtcMode	boolean	disable mtc mode	No
dsg	models.MdDsgCfg	dsg	No
enableBalanceUs	boolean	enable balance us	No
idInSg	integer	id in sg Required: true	No
insertionInterval	integer	insertion interval Maximum: 2000 Minimum: 100	No
ipInit	string	ip init	No
mac	string	mac	No
mapAdvance	models.MapAdvanceCfg	map advance	No
multiCast	models.McastCfg	multi cast	No
primDcid	[integer]	prim dcid	No
rangeBackoff	models.BackoffCfg	range backoff	No
registrationTimeout	integer	registration timeout Maximum: 60 Minimum: 2	No
reportVerboseRCP	boolean	report verbose r c p	No
rng	models.RngSgCfg	rng	No
sharedSecret	[string]	shared secret	No
syncInterval	integer	sync interval	No
ucId	[integer]	uc Id	No
usInitTech	integer	us init tech Maximum: 4 Minimum: 1	No

models.MdCfgs

Name	Type	Description	Required
models.MdCfgs	array		

models.MdDsgCfg

Name	Type	Description	Required
channelList	integer	channel list	No
dcdDisable	[integer]	dcd disable	No

Name	Type	Description	Required
tg	[integer]	tg	No
timer	integer	timer	No
vendorParam	integer	vendor param	No

models.ModProfCfg

Name	Type	Description	Required
entries	models.ModProfCfgEntries	entries	No
idInSg	integer	id in sg Required: true	No

models.ModProfCfgEntries

Name	Type	Description	Required
advPhyLongData	models.Profentries	adv phy long data	No
advPhyShortData	models.Profentries	adv phy short data	No
initialRanging	models.Profentries	initial ranging	No
longData	models.Profentries	long data	No
periodicRanging	models.Profentries	periodic ranging	No
request	models.Profentries	request	No
requestData	models.Profentries	request data	No
shortData	models.Profentries	short data	No
ugs	models.Profentries	ugs	No

models.ModProfCfgs

Name	Type	Description	Required
models.ModProfCfgs	array		

models.Mplsvc

Name	Type	Description	Required
experimental	integer	experimental Maximum: 7 Minimum: 0	No
modemMAC	string	modem m a c	No
peerIp	string	peer Ip	No
vcID	integer	vc ID Minimum: 1	No
vpnID	string	vpn ID Max Length: 255 Min Length: 1	No

models.Mplsvlansg

Name	Type	Description	Required
maxVlan	integer	max vlan Maximum: 4094 Minimum: 2	No
minVlan	integer	min vlan Maximum: 4094 Minimum: 2	No
sgId	integer	sg Id Minimum: 0	No

models.NetworkDelayCfg

Name	Type	Description	Required
dlmCfg	models.DlmCfg	dlm cfg	No
staticDelay	integer	static delay Maximum: 100000 Minimum: 30	No

models.OfdmDsCfg

Name	Type	Description	Required
attributeMask	integer	attribute mask	No
cyclicPrefix	integer	cyclic prefix Enum: [192 256 512 768 1024]	No
idInSg	integer	id in sg Required: true Maximum: 162 Minimum: 158	No
interleaverDepth	integer	interleaver depth Maximum: 32 Minimum: 1	No
pilotScaling	integer	pilot scaling Maximum: 120 Minimum: 48	No
plc	integer	plc Maximum: 1.218e+09 Minimum: 1.08e+08	No
profileControl	string	profile control	No
profileData	[models.OfdmProfileType]	profile data	No
profileNcp	string	profile ncp	No
rfMute	boolean	rf mute	No
rollOff	integer	roll off Enum: [64 128 192 256]	No
startFrequency	integer	start frequency Maximum: 1.218e+09 Minimum: 1.08e+08	No
subcarrierSpacing	string	subcarrier spacing Enum: [50KHZ 25KHZ]	No

Name	Type	Description	Required
width	integer	width Maximum: 1.92e+08 Minimum: 2.4e+07	No

models.OfdmDsCfgs

Name	Type	Description	Required
models.OfdmDsCfgs	array		

models.OfdmFreqExclBand

Name	Type	Description	Required
startFreq	integer	start freq	Maximum: 1.217e+09 Minimum: 1.08e+08
width	integer	width	Maximum: 1.11e+09 Minimum: 1e+06

models.OfdmModProfCfg

Name	Type	Description	Required
assigns	[models.OfdmProfAssigns]	assigns	No
description	string	description	No
idInSg	integer	id in sg	Required: true
modulationDefault	string	modulation default	No

models.OfdmModProfCfgs

Name	Type	Description	Required
models.OfdmModProfCfgs	array		

models.OfdmProfAssigns

Name	Type	Description	Required
modulation	string	modulation	No
rangeSubcarriers	models.RangeSubcarrier	range subcarriers	No

models.OfdmProfMgmtCfg

Name	Type	Description	Required
exempt-sc-pct	integer	exempt sc pct Maximum: 100 Minimum: 0	No
mer-margin-qdb	integer	mer margin qdb Maximum: 40 Minimum: 0	No
recm-prof-age	integer	recm prof age Maximum: 1440 Minimum: 1	No
rxmer-poll-interval	integer	rxmer poll interval Maximum: 1440 Minimum: 1	No
unfit-prof-age	integer	unfit prof age Maximum: 1440 Minimum: 1	No

models.OfdmProfileType

Name	Type	Description	Required
id	integer	id Required: true Maximum: 5 Minimum: 1	No
modulationDefault	string	modulation default	No
modulationProfile	integer	modulation profile	No

models.OfdmaDataIuc

Name	Type	Description	Required
idIuc	integer	id iuc Required: true Enum: [5 6 9 10 11 12 13]	No
modulation	string	modulation Enum: [none bpsk qpsk qam8 qam16 qam32 qam64 qam128 qam256 qam512 qam1024]	No
pilotPattern	integer	pilot pattern Maximum: 14 Minimum: 1	No

models.OfdmaDataIucOverWrite

Name	Type	Description	Required
idIuc	integer	id iuc Required: true Enum: [5 6 9 10 11 12 13]	No
modulation	string	modulation Enum: [none bpsk qpsk qam8 qam16 qam32 qam64 qam128 qam256 qam512 qam1024]	No
pilotPattern	integer	pilot pattern Maximum: 14 Minimum: 1	No
startFreq	integer	start freq Required: true Maximum: 2.04e+08 Minimum: 5e+06 Multiple Of: 50000	No

Name	Type	Description	Required
width	integer	width Required: true Maximum: 9.5e+07 Minimum: 50000 Multiple Of: 50000	No

models.OfdmaFreqPortBand

Name	Type	Description	Required
startFreq	integer	start freq Maximum: 2.04e+08 Minimum: 5e+06 Multiple Of: 50000	No
width	integer	width Maximum: 1.99e+08 Minimum: 50000 Multiple Of: 50000	No

models.OfdmaUsCfg

Name	Type	Description	Required
adminState	string	admin state	No
attributeMask	integer	attribute mask Maximum: 4.294967295e+09 Minimum: 0	No
cyclicPrefix	integer	cyclic prefix Enum: [96 128 160 192 224 256 288 320 384 512 640]	No
dataIucOverWrite	models.OfdmaDataIucOverWrite	data iuc over write	No
]	
docsisMode	string	docsis mode Enum: [ofdma]	No
equalizationCoeffEnable	boolean	equalization coeff enable	No
idInSg	integer	id in sg Required: true	No
initRngFreqStart	integer	init rng freq start Maximum: 1.971e+09 Minimum: 5e+06	No
modulation	integer	modulation Maximum: 500 Minimum: 401	No
powerLevel	integer	power level Maximum: 23 Minimum: -13	No
rollOffPeriod	integer	roll off period Enum: [0 32 64 96 128 160 192 224]	No

Name	Type	Description	Required
startFrequency	integer	start frequency Maximum: 1.971e+08 Minimum: 4.5e+06 Multiple Of: 50000	No
subcarrierSpacing	string	subcarrier spacing Enum: [50KHZ 25KHZ]	No
symbolsPerFrame	integer	symbols per frame Maximum: 36 Minimum: 6	No
width	integer	width Maximum: 9.6e+07 Minimum: 7.4e+06 Multiple Of: 50000	No

models.OfdmaUsCfgs

Name	Type	Description	Required
models.OfdmaUsCfgs	array		

models.OfdmaUsModProfCfg

Name	Type	Description	Required
dataIucs	[mod- els.OfdmaDataIuc]	data iucs	No
fineRngSubcarriers	integer	fine rng subcarriers Maximum: 512 Minimum: 64 Multiple Of: 2	No
idInSg	integer	id in sg Required: true	No
initialRngPreamble	integer	initial rng preamble Maximum: 8 Minimum: 1	No
initialRngSubcarriers	integer	initial rng subcarriers Maximum: 128 Minimum: 16 Multiple Of: 2	No
subcarrierSpacing	string	subcarrier spacing Enum: [50KHZ 25KHZ]	No

models.OfdmaUsModProfCfgs

Name	Type	Description	Required
models.OfdmaUsModProfCfgs	array		

models.OverlayInfo

Name	Type	Description	Required
overlay-type	string	overlay type Required: true Enum: [vxlan vlan]	No
vlan-info	models.OverlayVlanInfo	vlan info	No
vxlan-info	models.OverlayVxlanInfo	vxlan info	No

models.OverlayVlanInfo

Name	Type	Description	Required
cnbr-wan-bond-loadbalance	string	cnbr wan bond loadbalance Enum: [L2 L34 L23 RR BC AB]	No
cnbr-wan-bond-mode	string	cnbr wan bond mode Enum: [lacp roundrobin activebackup xor broadcast]	No
cnbr-wan-bonded-interface1	string	cnbr wan bonded interface1	No
cnbr-wan-bonded-interface2	string	cnbr wan bonded interface2	No
cnbr-wan-ifname	string	cnbr wan ifname Required: true	No
overlay-cin-vlan	integer	overlay cin vlan Required: true Maximum: 4095 Minimum: 1	No
overlay-l2vpn-mpls-vlan	integer	overlay l2vpn mpls vlan Maximum: 4095 Minimum: 1	No
overlay-l2vpn-vlan-vlan	integer	overlay l2vpn vlan vlan Maximum: 4095 Minimum: 1	No
overlay-wan-vlan	integer	overlay wan vlan Required: true Maximum: 4095 Minimum: 1	No
secondary-overlay-l2vpn-mpls-vlan	integer	secondary overlay l2vpn mpls vlan Maximum: 4095 Minimum: 1	No

Name	Type	Description	Required
secondary-overlay-l2vpn-vlan-vlan	integer	secondary overlay l2vpn vlan vlan Maximum: 4095 Minimum: 1	No

models.OverlayVxlanInfo

Name	Type	Description	Required
cnbr-loopback-ip	string	cnbr loopback ip Required: true	No
cnbr-wan-bond-loadbalance	string	cnbr wan bond loadbalance Enum: [L2 L34 L23 RR BC AB]	No
cnbr-wan-bond-mode	string	cnbr wan bond mode Enum: [lacp roundrobin activebackup xor broadcast]	No
cnbr-wan-bonded-interface1	string	cnbr wan bonded interface1	No
cnbr-wan-bonded-interface2	string	cnbr wan bonded interface2	No
cnbr-wan-ifname	string	cnbr wan ifname Required: true	No
cnbr-wan-ip	string	cnbr wan ip Required: true	No
cnbr-wan-prefix	integer	cnbr wan prefix Required: true Maximum: 32 Minimum: 1	No
overlay-cin-vni	integer	overlay cin vni Maximum: 1.6777215e+07 Minimum: 1	No
overlay-l2vpn-mpls-vni	integer	overlay l2vpn mpls vni Maximum: 1.6777215e+07 Minimum: 1	No
overlay-l2vpn-vlan-vni	integer	overlay l2vpn vlan vni Maximum: 1.6777215e+07 Minimum: 1	No
overlay-wan-vni	integer	overlay wan vni Maximum: 1.6777215e+07 Minimum: 1	No

Name	Type	Description	Required
secondary-overlay-l2vpn-mpls-vni	integer	secondary overlay l2vpn mpls vni Maximum: 1.6777215e+07 Minimum: 1	No
secondary-overlay-l2vpn-vlan-vni	integer	secondary overlay l2vpn vlan vni Maximum: 1.6777215e+07 Minimum: 1	No
secondary-sp-router-loopback-ip	string	secondary sp router loopback ip	No
secondary-sp-router-wan-ip	string	secondary sp router wan ip	No
sp-router-loopback-ip	string	sp router loopback ip Required: true	No
sp-router-wan-ip	string	sp router wan ip Required: true	No

models.Packetcable

Name	Type	Description	Required
copsAddrIp	string	cops addr Ip	No
copsGwIp	string	cops gw Ip	No
pcEnable	boolean	pc enable	No
pcMaxGate	integer	pc max gate Maximum: 51200 Minimum: 1	No
sendSubscriberEnable	boolean	send subscriber enable	No
t0Timer	integer	t0 timer Maximum: 1e+09 Minimum: 1	No
t1Timer	integer	t1 timer Maximum: 1e+09 Minimum: 1	No

models.PfgActive

Name	Type	Description	Required
cm_ds	integer	cm ds Minimum: -1	No
cm_us	integer	cm us Minimum: -1	No
host_ds	integer	host ds Minimum: -1	No
host_us	integer	host us Minimum: -1	No
mta_ds	integer	mta ds Minimum: -1	No
mta_us	integer	mta us Minimum: -1	No

Name	Type	Description	Required
ps_ds	integer	ps ds Minimum: -1	No
ps_us	integer	ps us Minimum: -1	No
stb_ds	integer	stb ds Minimum: -1	No
stb_us	integer	stb us Minimum: -1	No

models.PfgGroup

Name	Type	Description	Required
grpList	[models.PfgGrpList]	grp list	No

models.PfgGrpList

Name	Type	Description	Required
id	integer	id	No
ruleList	[models.PfgRuleList]	rule list	No

models.PfgRuleList

Name	Type	Description	Required
dstIp	string	dst Ip	No
dstIpPrefixLen	integer	dst Ip prefix len Maximum: 128 Minimum: -1	No
dstportOrIcmpcodeFirst	integer	dstport or icmpcode first Minimum: -1	No
dstportOrIcmpcodeLast	integer	dstport or icmpcode last Minimum: -1	No
isIpv6	integer	is Ipv6 Maximum: 1 Minimum: 0	No
isPermit	integer	is permit Maximum: 1 Minimum: 0	No
proto	integer	proto Minimum: -1	No
srcIp	string	src Ip	No
srcIpPrefixLen	integer	src Ip prefix len Maximum: 128 Minimum: -1	No
srcportOrIcmptypeFirst	integer	srcport or icmptype first Minimum: -1	No
srcportOrIcmptypeLast	integer	srcport or icmptype last Minimum: -1	No
tcpFlagsMask	integer	tcp flags mask Minimum: -1	No
tcpFlagsValue	integer	tcp flags value Minimum: -1	No
tosMask	integer	tos mask Minimum: -1	No
tosValue	integer	tos value Minimum: -1	No

models.PreEqualizationExcludeCfg

Name	Type	Description	Required
address	string	address Pattern: ([0-9a-fA-F]{2}[:-]{2}){2}[0-9a-fA-F]{2} ([0-9a-fA-F]{2}[:-]{2})5[0-9a-fA-F]{2} ([0-9a-fA-F]{4}\.){2}[0-9a-fA-F]{4}\$	No

models.PreEqualizationExcludeCfgs

Name	Type	Description	Required
models.PreEqualizationExcludeCfgs	array		

models.PrivacyCfg

Name	Type	Description	Required
AcceptSelfSignCert	boolean	accept self sign cert	No
BpiPlusPolicy	string	bpi plus policy Enum: [capable-enforcement d11-enabled-enforcement d11-enforcement total-enforcement]	No
DsxSupport	boolean	dsx support	No
EaePolicy	string	eae policy Enum: [capability-enforcement disable-enforcement ranging-enforcement total-enforcement]	No
Kek	models.PrivacyKekTimeout		No
Mandatory	boolean	mandatory	No
OaepSupport	boolean	oaep support	No
RetainFailedCert	boolean	retain failed cert	No
SkipValidityPeriod	boolean	skip validity period	No
Tek	models.PrivacyTekTimeout		No

models.PrivacyKekTimeout

Name	Type	Description	Required
GraceTime	integer	grace time Maximum: 302400 Minimum: 300	No
LifeTime	integer	life time Maximum: 6.048e+06 Minimum: 86400	No

models.PrivacyTekTimeout

Name	Type	Description	Required
GraceTime	integer	grace time Maximum: 302399 Minimum: 300	No
LifeTime	integer	life time Maximum: 604800 Minimum: 1800	No

models.Profentries

Name	Type	Description	Required
byteInterleaverBlockSize	integer	byte interleaver block size	No
byteInterleaverDepth	integer	byte interleaver depth	No
channelType	string	channel type	No
differentialEncoding	boolean	differential encoding	No
fecCodewordLength	integer	fec codeword length	No
fecErrorCorrection	integer	fec error correction	No
guardTimeSize	integer	guard time size Maximum: 255 Minimum: 0	No
lastCodewardShortened	boolean	last codeward shortened	No
maxBurstSize	integer	max burst size	No
modulation	string	modulation Enum: [qpsk qam8 qam16 qam32 qam64 qam128]	No
preamble	string	preamble	No
preambleLength	integer	preamble length	No
scrambler	boolean	scrambler	No
scramblerSeed	integer	scrambler seed	No
tcmErrorCorrectionOn	boolean	tcm error correction on	No

models.Ptp

Name	Type	Description	Required
PtpDomain	integer	ptp domain Maximum: 127 Minimum: 0	No
PtpDscp	integer	ptp dscp Maximum: 63 Minimum: 0	No
PtpGwIp	string	ptp gw Ip Required: true	No
PtpGwIpAlt	string	ptp gw Ip alt	No
PtpMasterIp	string	ptp master Ip Required: true	No
PtpMasterIpAlt	string	ptp master Ip alt	No

models.PtpPort

Name	Type	Description	Required
adminState	string	admin state	No
annncReceiptTimeout	integer	annnc receipt timeout	No
cos	integer	cos	No

Name	Type	Description	Required
dscp	integer	dscp	No
enetPortIndex	integer	enet port index	No
gateway	string	gateway	No
gatewayAlt	string	gateway alt	No
localPriority	integer	local priority Maximum: 255 Minimum: 0	No
logAnnInterval	integer	log ann interval	No
logDelayReqInterval	integer	log delay req interval	No
logSyncInterval	integer	log sync interval	No
masterAddr	string	master addr	No
masterAddrAlt	string	master addr alt	No
masterAdminState	string	master admin state	No
preferAlternate	boolean	prefer alternate	No
ptpPortIndex	integer	ptp port index	No
unicastDuration	integer	unicast duration	No

models.RCPChan

Name	Type	Description	Required
CenterFreqAssign	integer	center freq assign Maximum: 4.294967295e+09 Minimum: 0 Multiple Of: 62500	No
ConnectedOffset	integer	connected offset Maximum: 255 Minimum: 0	No
Connectivity	string	connectivity Pattern: ^([0-1]*)&	No
Index	integer	index Maximum: 255 Minimum: 0	No
PrimDSChanIndicator	boolean	prim d s chan indicator	No

models.RCPModule

Name	Type	Description	Required
AdjChannels	integer	adj channels	No
ChanBlockRange	models.RCPModuleChanBlockRange		No
CommonPhyLayerPara	string	common phy layer para Pattern: ^([0-1]*)&	No
Connectivity	string	connectivity Pattern: ^([0-1]*)&	No
FirstChanCenterFreqAssign	integer	first chan center freq assign Maximum: 4.294967295e+09 Minimum: 0 Multiple Of: 62500	No

Name	Type	Description	Required
Index	integer	index Maximum: 255 Minimum: 1	No
ResequChanSubCap	capability	resequ chan sub capability Pattern: ^([0]{1}[0-1]*)&	No

models.RCPModuleChanBlockRange

Name	Type	Description	Required
MaxCenterFrequency	frequency	max center frequency Maximum: 1002 Minimum: 999	No
MinCenterFrequency	frequency	min center frequency Maximum: 112 Minimum: 111	No

models.RangeSubcarrier

Name	Type	Description	Required
freqAbs	integer	freq abs Maximum: 1.218e+09 Minimum: 1.08e+08	No
width	integer	width Maximum: 1.92e+08 Minimum: 25000	No

models.RateLimitCfg

Name	Type	Description	Required
BurstTimeMs	integer	burst time ms Maximum: 8000 Minimum: 1000	No
RatePer4Sec	integer	rate per4 sec Required: true Maximum: 255 Minimum: 1	No

models.RcpCfg

Name	Type	Description	Required
CenterFrequencySpacingMHz	frequency	center frequency spacing m hz Enum: [6 8]	No
RCP-ID	string	r c p ID Required: true Pattern: ^([0]{1}[x]{1}[a-fA-F0-9]{10})\$	No
RCPName	string	r c p name Required: true Max Length: 15 Min Length: 1	No

Name	Type	Description	Required
ReceiveChamps	[mod- els.RCPChan]	receive channels Required: true	No
ReceiveModEncodings	[mod- els.RCPModule]	receive mod encoding	No

models.RcpCfgs

Name	Type	Description	Required
models.RcpCfgs	array		

models.RfDsPort

Name	Type	Description	Required
adminState	string	admin state	No
basePower	integer	base power Maximum: 61 Minimum: 20	No
channel	[integer]	channel	No
maxOfdmSpectrum	integer	max ofdm spectrum	No
ofdmFreqExclBand	[models.OfdmFreqExclBand]	ofdm freq excl band	No
portId	integer	port Id	No
rfMute	boolean	rf mute	No

models.RfFiberNode

Name	Type	Description	Required
dsPort	[integer]	ds port	No
fnId	integer	fn Id	No
usPort	[integer]	us port	No

models.RfUsPort

Name	Type	Description	Required
channel	[integer]	channel	No
ofdmaFreqExclBand	[models.OfdmaFreqPortBand]	ofdma freq excl band	No
ofdmaFreqUnusedBand	[models.OfdmaFreqPortBand]	ofdma freq unused band	No
portId	integer	port Id	No

models.Rip

Name	Type	Description	Required
flushTimer	integer	flush timer	No
holddownTimer	integer	holddown timer	No
invalidTimer	integer	invalid timer	No
ripEnable	boolean	rip enable	No
ripPassiveMode	boolean	rip passive mode	No
updateTimer	integer	update timer	No

models.RngSgCfg

Name	Type	Description	Required
extPower	boolean	ext power	No
maxChannelOffset	integer	max channel power offset Maximum: 12 Minimum: 0	No
powerAdjust	integer	power adjust Maximum: 6 Minimum: -3	No
rangingInitTechnique	string	ranging init technique Enum: [reInitMAC broadcast unicast ranging directUse]	No
rangingInterval	integer	ranging interval Maximum: 30000 Minimum: 20000	No
reduceTransmitChannelSet	integer	reduce transmit channel set	No
t4Multiplier	integer	t4 multiplier Maximum: 10 Minimum: 0	No

models.RpdCfg

Name	Type	Description	Required
idInSg	integer	id in sg	No
netDelayCfg	models.NetworkDelayCfg	net delay cfg	No
rfTopology	models.RpdRfTopology	rf topology	No
rpdIp	string	rpd Ip	No
rpdLocation	models.RpdLocation	rpd location	No
rpdMac	string	rpd mac	No
rpdName	string	rpd name Max Length: 256	No

models.RpdLocation

Name	Type	Description	Required
address	string	address	No
city	string	city	No
latitude	number	latitude	No
longitude	number	longitude	No
neighborhood	string	neighborhood	No
region	string	region	No

models.RpdMultiCoreCfg

Name	Type	Description	Required
models.RpdMultiCoreCfg	array		

models.RpdMultiCoreItem

Name	Type	Description	Required
coreip	string	coreip	No
description	string	description	No

models.RpdPtpCfg

Name	Type	Description	Required
domain	integer	domain	No
dtiMode	string	dti mode Enum: [SlaveDtiMode MasterDtiMode]	No
priority1	integer	priority1 Maximum: 255 Minimum: 0	No
priority2	integer	priority2 Maximum: 255 Minimum: 0	No
ptpClkProfileId	string	ptp clk profile Id	No
ptpPortCfg	[models.PtpPort]	ptp port cfg	No

models.RpdRfTopology

Name	Type	Description	Required
dsPort	[models.RfDsPort]	ds port	No
fiberNode	[models.RfFiberNode]	fiber node	No
usPort	[models.RfUsPort]	us port	No

models.RpdSsdCfg

Name	Type	Description	Required
ccvc	string	ccvc Max Length: 5000 Min Length: 1	No
filename	string	filename Max Length: 128 Min Length: 1	No
ip	string	ip	No
mcvc	string	mcvc Max Length: 5000 Min Length: 1	No
proto	integer	proto Enum: [1 2]	No

models.RpdTelemetryCfg

Name	Type	Description	Required
interval	integer	interval Maximum: 60 Minimum: 0	No
transport	string	transport Enum: [gRPC]	No

models.Sav

Name	Type	Description	Required
savEnable	boolean	sav enable	No
savEntries	[models.SavGroupStruct]	sav entries	No

models.SavGroupStruct

Name	Type	Description	Required
grpName	string	grp name Max Length: 16 Min Length: 1	No
prefixes	[string]	prefixes Max Length: 4	No

models.SbrlCfg

Name	Type	Description	Required
subMacAddr\$ sbrlList	sub mac addr sbrl list		No
els.	SubMacA	RbShrdHd	true
]		

models.Sg

Name	Type	Description	Required
cnBRName	string	cn b r name	No
depiFragment	boolean	depi fragment	No

Name	Type	Description	Required
description	string	description Required: true	No
dhcp	models.Dhcp	dhcp	No
ds	models.DsCfgs	ds Required: true	No
dsResilCfg	models.DsResilCfgs	dsResil cfg	No
dsg	models.DsgCfgs	dsg	No
dsmtu	integer	dsmtu Required: true	No
layer3Cfg	models.Layer3Cfgs	layer3 cfg	No
mapCtrl	models.MapCtrl	mapctrl	No
md	models.MdCfgs	md Required: true	No
modProfs	models.ModProf	modProfs Required: true	No
ofdmDs	models.OfdmDs	ofdmDs	No
ofdmModProfs	models.OfdmModProf	ofdmModProfs	No
ofdmProfMgmt	models.OfdmProfMgmt	ofdmProfMgmt	No
ofdmaUs	models.OfdmaUs	ofdmaUs	No
ofdmaUsMod	models.OfdmaUsMod	ofdmaUsMod	No
preEqualization	models.PreEqualization	preEqualization	No
privacy	models.Privacy	privacy	No
punt	models.Punt	punt	No
rccp	models.RcpCfgs	rccp	No
rpdCfg	models.RpdCfgs	rpd cfg Required: true	No
rpdMultiCore	models.RpdMultiCore	rpdMultiCore cfg	No
rpdPtpCfg	models.RpdPtpCfgs	rpdPtp cfg Required: true	No
rpdSsdCfg	models.RpdSsdCfgs	rpdSsd cfg	No
rpdTelemetry	models.RpdTelemetry	rpdTelemetry cfg	No
sgName	string	sg name Required: true Max Length: 128 Pattern: ^([A-Za-z0-9] ([A-Za-z0-9-]{0,61}[A-Za-z0-9])?(\.\.A-Za-z?)*)\$	No
specsvl	boolean	specsvl	No
subMacAddr	models.SbrlCfgs	sub mac addr sbrl	No
svcds	models.SvcDscfgs	svcds	No
svcus	models.SvcUscfgs	svcus	No
txPowerHead	models.TxPowerHead	txPowerHead	No
us	models.UsCfgs	us Required: true	No
usmtu	integer	usmtu Required: true	No

models.SpRouter

¹A-Za-z

Name	Type	Description	Required
bgp-peer	string	bgp peer Required: true	No
cin-gateway	string	cin gateway	No
ptp-gateway	string	ptp gateway	No
ptp-gateway-alt	string	ptp gateway alt	No
router-id	string	router id Required: true	No
rpd-ptp-gateway	string	rpd ptp gateway	No
sg-peer	string	sg peer Required: true	No

models.Spr

Name	Type	Description	Required
sp-router-	string	sp router redundancy mode	No
redundancy-		Enum: [active-standby	
mode		active-active]	
sp-routers	[mod- els.SpRouter]	sp routers Required: true	No

models.Sprstat

Name	Type	Description	Required
bgpAsn	integer	bgp asn	No
routerId	string	router Id Max Length: 255 Min Length: 1	No
state	string	state Enum: [Up Down]	No

models.SubMacAddrSbrList

Name	Type	Description	Required
PuntCause	string	punt cause Required: true Enum: [dhcpv4_us dhcpv6_us cable_arp_req cable_arp_reply ndp svfy_v4 svfy_v6 ds_lq_v4 ds_lq_v6 mobility_v4 mobility_v6 tftp_req ds_no_adj_v4 ds_no_adj_v6]	No
RateLimitCf	models.RateLimitCf	cfg Required: true	No

models.SvcDsCfg

Name	Type	Description	Required
attrAggreRuleMask	integer	attr aggre rule mask Maximum: 4.294967295e+09 Minimum: 0	No
forbAttrMask	integer	forb attr mask Maximum: 4.294967295e+09 Minimum: 0	No
iPTypServOvri	integer	i p typ serv owri Maximum: 63 Minimum: -1	No
maxDsLatcy	integer	max ds latcy Maximum: 4.294967295e+09 Minimum: 0	No
maxSustTrafRate	integer	max sust traf rate Maximum: 4.294967295e+09 Minimum: 0	No
maxTrafBurst	integer	max traf burst Maximum: 4.294967295e+09 Minimum: 1522	No
minRsvdRatePktSize	integer	min rsvd rate pkt size Maximum: 65535 Minimum: 0	No
minRsvdTrafRate	integer	min rsvd traf rate Maximum: 4.294967295e+09 Minimum: 0	No
peakTrafRate	integer	peak traf rate Maximum: 4.294967295e+09 Minimum: 0	No
qoSParaSetType	integer	qo s para set type Enum: [1 2 3 4 5 6 7]	No
requAttrMask	integer	requ attr mask Maximum: 4.294967295e+09 Minimum: 0	No
reseqDisab	boolean	reseq disb	No
servClassName	string	serv class name Required: true Max Length: 15 Min Length: 1	No
tmoutActQoSParam	integer	tmout act qo s param Maximum: 65535 Minimum: 0	No
tmoutAdmQoSParam	integer	tmout adm qo s param Maximum: 65535 Minimum: 0	No

Name	Type	Description	Required
trafPrio	integer	traf prio Maximum: 7 Minimum: 0	No

models.SvcDsCfgs

Name	Type	Description	Required
models.SvcDsCfgs	array		

models.SvcUsCfg

Name	Type	Description	Required
attrAggreRuleMask	integer	attr aggre rule mask Maximum: 4.294967295e+09 Minimum: 0	No
forbAttrMask	integer	forb attr mask Maximum: 4.294967295e+09 Minimum: 0	No
graPerIntvl	integer	gra per intvl Maximum: 127 Minimum: 0	No
iPTypOfServ	integer	i p type of serv ovwri Maximum: 63 Minimum: -1	No
maxConcaBurst	integer	max conca burst Maximum: 65535 Minimum: 0	No
maxSustTraf	integer	max sust traf rate Maximum: 4.294967295e+09 Minimum: 0	No
maxTrafBurst	integer	max traf burst Maximum: 4.294967295e+09 Minimum: 1522	No
minRsvdRatePktSize	integer	min rsvd rate pkt size Maximum: 65535 Minimum: 0	No
minRsvdTrafRate	integer	min rsvd traf rate Maximum: 4.294967295e+09 Minimum: 0	No
multiConteReqPageWin	integer	multi conte req bac win Maximum: 12 Minimum: 4	No
multiNumBytesReq	integer	multi num bytes requ Enum: [1 2 4 8 16]	No

Name	Type	Description	Required
nomGrantIntvl	integer	nom grant intvl Maximum: 4.294967295e+09 Minimum: 0	No
nomPolIntvl	integer	nom pol intvl Maximum: 4.294967295e+09 Minimum: 0	No
peakTrafRate	integer	peak traf rate Maximum: 4.294967295e+09 Minimum: 0	No
qoSParaSetType	integer	qoS para set type Enum: [1 2 3 4 5 6 7]	No
reqTxPolicy	integer	req tx policy	No
requAttrMask	integer	requ attr mask Maximum: 4.294967295e+09 Minimum: 0	No
servClassName	string	serv class name Required: true Max Length: 15 Min Length: 1	No
servFlowSchedType	integer	serv flow sched type Required: true Maximum: 6 Minimum: 0	No
tmoutActQoSParam	integer	tmout act qos param Maximum: 65535 Minimum: 0	No
tmoutAdmQoSParam	integer	tmout adm qos param Maximum: 65535 Minimum: 0	No
toleGrantJit	integer	tole grant jit Maximum: 4.294967295e+09 Minimum: 0	No
tolePollJit	integer	tole poll jit Maximum: 4.294967295e+09 Minimum: 0	No
trafPrio	integer	traf prio Maximum: 7 Minimum: 0	No
ugsGrantSize	integer	ugs grant size Maximum: 65535 Minimum: 0	No
ugsGrantTimeRef	integer	ugs grant time ref Enum: [0 1 2 3 4 294 967 295]	No

models.SvcUsCfgs

Name	Type	Description	Required
models.SvcUsCfgs	array		

models.TftpProxy

Name	Type	Description	Required
secondaryv4Gw	string	secondaryv4 gw	No
secondaryv6Gw	string	secondaryv6 gw	No
v4Gw	string	v4 gw	No
v6Gw	string	v6 gw	No

models.TxPowerHeadroomCfg

Name	Type	Description	Required
oui	string	oui Pattern: ^([0-9a-fA-F]{2}[:-]){2}[0-9a-fA-F]{2}\\$	No
power	integer	power Maximum: 6 Minimum: 1	No

models.TxPowerHeadroomCfgs

Name	Type	Description	Required
models.TxPowerHeadroomCfgs	array		

models.UsCfg

Name	Type	Description	Required
adminState	string	admin state	No
attributeMask	integer	attribute mask Maximum: 4.294967295e+09 Minimum: 0	No
channelWidth	integer	channel width	No
docsisMode	string	docsis mode Enum: [tdma atdma tdma_atdma]	No
equalizationCoeffEnable	boolean	equalization coeff enable	No
equalizationErrorRecovery	boolean	equalization error recovery	No
freqAdjustAvg	integer	freq adjust averaging Maximum: 100 Minimum: 10	No
frequency	integer	frequency Maximum: 8.5e+07 Minimum: 5e+06	No

Name	Type	Description	Required
idInSg	integer	id in sg Required: true	No
ingressNoiseCancelEnable	boolean	ingress noise cancel enable	No
modulation	integer	modulation	No
powerAdjustContinue	integer	power adjust continue	No
		Maximum: 15 Minimum: 2	
powerAdjustNoise	integer	power adjust noise	No
		Maximum: 100 Minimum:	
	10		
powerAdjustThreshold	integer	power adjust threshold	No
		Maximum: 10 Minimum: 0	
powerLevel	integer	power level Maximum: 23	No
		Minimum: -7	
powerLevelAdjust	integer	power level adjust	No
slotSize	integer	slot size	No

models.UsCfgs

Name	Type	Description	Required
models.UsCfgs	array		

models.VendorCfg

Name	Type	Description	Required
id	integer	id	No
oui	string	oui	No
value	string	value	No

models.Wiring

Name	Type	Description	Required
cluster-type	string	cluster type Required: true Enum: [SNSI_NORM AIO_RM_MUL_NODES]	No
l3-info	models.WiringL3Info	Required: true	No
mtu	integer	mtu	No
number-of-docsis-node	integer	number of docsis node	No

Name	Type	Description	Required
overlay-info	models.OverlayInfo	Overlay info Required: true	No

models.WiringL3Info

Name	Type	Description	Required
bgp-agent-if-ipv4	[string]	bgp agent if ipv4 Required: true	No
bgp-agent-if-ipv6	[string]	bgp agent if ipv6 Required: true	No
cin-ipv4-prefix	integer	cin ipv4 prefix Maximum: 32 Minimum: 1	No
cin-ipv6-prefix	integer	cin ipv6 prefix Maximum: 128 Minimum: 1	No
cmts-cops-if-ipv4	[string]	cmts cops if ipv4	No
cmts-cops-if-ipv6	[string]	cmts cops if ipv6	No
dc-link-ipv4-prefix	integer	dc link ipv4 prefix Required: true Maximum: 32 Minimum: 1	No
dc-link-ipv6-prefix	integer	dc link ipv6 prefix Required: true Maximum: 128 Minimum: 1	No
dmic-if-ipv4	[string]	dmcif if ipv4 Required: true	No
dmcif-if-ipv6	[string]	dmcif if ipv6 Required: true	No
ptp-if-ipv4	[string]	ptp if ipv4	No
ptp-if-ipv6	[string]	ptp if ipv6	No
ptp-mac-addr	[string]	ptp mac addr Required: true	No
relayproxy-if-ipv4	[string]	relayproxy if ipv4 Required: true	No
relayproxy-if-ipv6	[string]	relayproxy if ipv6 Required: true	No
rphmgr-if-ipv4	[string]	rphmgr if ipv4	No
rphmgr-if-ipv6	[string]	rphmgr if ipv6	No

Name	Type	Description	Required
vpp-dp-rpd-if-ipv4	[string]	vpp dp rpd if ipv4	No
vpp-dp-rpd-if-ipv6	[string]	vpp dp rpd if ipv6	No

Operations Hub RPD/SG Operation API

Version: 1.0

License: [Apache 2.0](#)

/loglevel

GET

Summary Get Current LogLevel

Description Get Current LogLevel

Responses

Code	Description	Schema
200	OK	rpd_operation.LogLevel

PUT

Summary Set LogLevel

Description Set LogLevel

Parameters

Name	Located in	Description	Required	Schema
LogLevel	body	Log Level	Yes	rpd_operation.LogLevel

Responses

Code	Description	Schema
200	OK	rpd_operation.LogLevel

/v1/hashelf/reload

POST

Summary Reboot HA Shelf's line card or whole chassis

Description reboot HA Shelf's line card or HAShelf chassis

Parameters

Name	Located in	Description	Required	Schema
rpd-id	query	This rpd id is the primary RPD in the shelf	Yes	string
slot-number	query	slot number is the HAShelf's Line card number, from 0 to 12. If slot-number is set as -1, it means to reboot the whole chassis	Yes	string
cluster-id	query	id designating a cnBR cluster	Yes	string

Responses

Code	Description	Schema
202	Accepted UTSC start request	string
400	Could be malformed or incorrect query parameters	string
500	Internal Server Error	string

/v1/if-index

GET

Summary Get ifindex for all US ports

Description Get ifindex for all US ports, it is for snmp

Responses

Code	Description	Schema
200	OK	main.IfIndexTable
400	Bad Request	string
500	Internal Server Error	string

/v1/pnm-session

GET

Summary Get PNM Session configuration

Description Get Proactive Network Maintenance(PNM) Session Configuration

Parameters

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string

Responses

Code	Description	Schema
200	OK	main.PnmSessionForUser
400	Bad Request	string
500	Internal Server Error	string

PUT

Summary Config PNM session

Description Configure Proactive Network Maintenance(PNM) Session

Parameters

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string
Configuration	body	PNM Session Configuration	Yes	main.PnmSessionForUser

Responses

Code	Description	Schema
202	Accepted configuring pnm session request	string
400	Could be malformed or incorrect query parameters	string
500	Internal Server Error	string

/v1/rpd/cvc**GET****Summary** Get RPD CVC page**Description** Get RPD CVC page**Responses**

Code	Description	Schema
200	OK	string

POST**Summary** Upload RPD CVC**Description** Upload RPD CVC**Parameters**

Name	Located in	Description	Required	Schema
cvc-name	formData	cvc name	Yes	string
cvc-txt	formData	cvc txt	Yes	string

Responses

Code	Description	Schema
200	OK	string

/v1/rpd/cvc/{cvc-name}**DELETE****Summary** Delete RPD CVC**Description** Delete RPD CVC**Parameters**

Name	Located in	Description	Required	Schema
cvc-name	path	RPD CVC name	Yes	string

Responses

Code	Description	Schema
200	OK	string

/v1/rpd/image**GET****Summary** Get RPD image page**Description** Get RPD image page**Responses**

Code	Description	Schema
200	OK	string

POST**Summary** Upload RPD image**Description** Upload RPD image**Parameters**

Name	Located in	Description	Required	Schema
file	formData	RPD image file	Yes	file

Responses

Code	Description	Schema
200	OK	string

/v1/rpd/image/{filename}**DELETE****Summary** Delete RPD image**Description** Delete RPD image**Parameters**

Name	Located in	Description	Required	Schema
filename	path	RPD image file name	Yes	string

Responses

Code	Description	Schema
200	OK	string

/v1/rpd/ssd**GET****Summary** Get RPD SSD page**Description** Get RPD SSD page**Responses**

Code	Description	Schema
200	OK	string

POST**Summary** Trigger RPD SSD**Description** Trigger RPD SSD

Parameters

Name	Located in	Description	Required	Schema
rpd-id	query	rpd id	Yes	string
cluster-id	query	cluster id	Yes	string
ssd_payload	formData	{‘address’:‘ip address’, ‘ip’: ‘ip address’, ‘proto’:1 , ‘filename’:‘rpd file name’, ‘ccvc’:‘’, ‘mcvc’:‘’}	Yes	string
sg_id	formData	sg id	Yes	string
next_boot	formData	true or false	Yes	string

Responses

Code	Description	Schema
200	OK	string

/v1/rpd/ssd-state**GET****Summary** Get RPD SSD state**Description** Get RPD SSD state**Responses**

Code	Description	Schema
200	OK	string

/v1/rpd/upgrade/{image}**POST****Summary** Trigger RPD SSD**Description** Trigger RPD SSD**Parameters**

Name	Located in	Description	Required	Schema
image	path	image name	Yes	string
rpd	formData	rpd id	Yes	string
next_boot	formData	true or false	Yes	string

Responses

Code	Description	Schema
200	OK	string

/v1/sg/config/canary**POST****Summary** SG config canary upgrade**Description** SG config canary upgrade**Parameters**

Name	Located in	Description	Required	Schema
CanaryParams	body	Canary params	Yes	sg_cfg_canary.RequestBody

Responses

Code	Description	Schema
202	Accepted	sg_cfg_canary.Result
400	Bad Request	sg_cfg_canary.Error

/v1/sg/config/canary/transactions**GET****Summary** Get all transactions**Description** Get all transaction ids**Responses**

Code	Description	Schema
200	OK	[string]
404	Not Found	sg_cfg_canary.Error

/v1/sg/config/canary/transactions/active

GET

Summary Get active canary transactions

Description Get active canary transactions

Responses

Code	Description	Schema
200	OK	[sg_cfg_canary.CanaryTransaction]
404	Not Found	sg_cfg_canary.Error

/v1/sg/config/canary/transactions/{transaction-id}

GET

Summary Get specific canary transaction status

Description Get the status of specific canary transaction

Parameters

Name	Located in	Description	Required	Schema
transaction-id	path	transaction-id	Yes	string

Responses

Code	Description	Schema
200	OK	sg_cfg_canary.CanaryTransaction
404	Not Found	sg_cfg_canary.Error

/v1/sg/config/canary/transactions/{transaction-id}/revert-canary

POST

Summary Revertback canary SGs' config

Description Revertback configuration of canary service groups

Parameters

Name	Located in	Description	Required	Schema
transaction-id	path	transaction-id	Yes	string

Responses

Code	Description	Schema
202	Accepted	sg_cfg_canary.Result
400	Bad Request	sg_cfg_canary.Error

/v1/sg/config/canary/transactions/{transaction-id}/upgrade-all

POST

Summary Upgrade all SGs of previous canary transactions

Description Upgrade all service groups of previous canary transactions

Parameters

Name	Located in	Description	Required	Schema
transaction-id	path	transaction-id	Yes	string

Responses

Code	Description	Schema
202	Accepted	sg_cfg_canary.Result
400	Bad Request	sg_cfg_canary.Error

/v1/sg/{cmts-id}/{sg-name}

PUT

Summary Update/RMA SG

Description Trigger Update,RMA existing SG

Parameters

Name	Located in	Description	Required	Schema
cmts-id	path	cmts-id	Yes	string
sg-name	path	sg-name	Yes	string
sg-config	body	SG Configuration	Yes	rpd_operation.SgConfig

Responses

Code	Description	Schema
202	Accepted	rpd_operation.Result
400	Bad Request	rpd_operation.Error

POST

Summary SG Adding

Description Trigger Adding new SG

Parameters

Name	Located in	Description	Required	Schema
cmts-id	path	cmt-id	Yes	string
sg-name	path	sg-name	Yes	string
sg-config	body	SG Configuration	Yes	rpd_operation.SgConfig

Responses

Code	Description	Schema
202	Accepted	rpd_operation.Result
400	Bad Request	rpd_operation.Error

DELETE**Summary** Delete SG**Description** Trigger Deleting existing SG**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	cmts-id	Yes	string
sg-name	path	sg-name	Yes	string

Responses

Code	Description	Schema
202	Accepted	rpd_operation.Result

/v1/sg/{cmts-id}/{sg-name}/requests**GET****Summary** SG Operation history**Description** Trigger SG Operation query**Parameters**

Name	Located in	Description	Required	Schema
cmts-id	path	cmts-id	Yes	string
sg-name	path	sg-name	Yes	string

Responses

Code	Description	Schema
200	OK	[rpd_operation.restTransactionTable]
400	Bad Request	rpd_operation.Error

/v1/sg/{cmts-id}/{sg-name}/status

GET

Summary SG and Operation status

Description Trigger SG status query

Parameters

Name	Located in	Description	Required	Schema
cmts-id	path	cmts-id	Yes	string
sg-name	path	sg-name	Yes	string

Responses

Code	Description	Schema
200	OK	rpd_operation.Status

/v1/sg/{transaction-id}/status

GET

Summary SG Operation Trans status

Description Get the status of SG Operation

Parameters

Name	Located in	Description	Required	Schema
transaction-id	path	transaction-id	Yes	string

Responses

Code	Description	Schema
200	OK	rpd_operation.restTransactionTable
400	Bad Request	rpd_operation.Error

/v1/shelf/group-information**GET****Summary** Get Shelf group info**Description** Get 1RU/HA Shelf group information for all RPDs**Parameters**

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string

Responses

Code	Description	Schema
200	OK	[main.ShelfEntry]

/v1/shelf/platform-information/{parameter}**GET****Summary** Get Shelf Platform Information details**Description** Get detailed information about the 1RU/HA shelf including alarm, fan, power, eeprom**Parameters**

Name	Located in	Description	Required	Schema
parameterpath		Choose between: [alarm,fan,power,sensors,eeprom-fanio,eeprom-psio,eeprom-psu]	Yes	string
rpd-id	query	rpd id	Yes	string
cluster-id	query	id designating a cnBR cluster	Yes	string

Responses

Code	Description	Schema
200	OK	main.UtscConfigForUser
500	Internal Server Error	string

/v1/shelf/request-output/{parameter}

POST

Summary Post Shelf Platform Information details

Description request the platform inforation output of 1RU/HA shelf for type like alarm, fan, power, eeprom

Parameters

Name	Located in	Description	Required	Schema
parameterpath		Choose between: [alarm,fan,power,sensors,eeprom-fanio,eeprom-psio,eeprom-psu]	Yes	string
rpd-id	query	rpd id	Yes	string
cluster-id	query	id designating a cnBR cluster	Yes	string

Responses

Code	Description	Schema
202	Accepted UTSC start request	string
400	Could be malformed or incorrect query parameters	string
500	Internal Server Error	string

/v1/utsc

GET

Summary Get UTSC configuration

Description Get UTSC(Upstream Triggered Spectrum Capture) configuration

Parameters

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string
sg-id	query	id designating a Service Group	Yes	string

Responses

Code	Description	Schema
200	OK	main.UtscConfigForUser
400	Could be malformed or incorrect query parameters	string
404	Not found UTSC entry	string
500	Internal Server Error	string

DELETE**Summary** Remove UTSC Configuration**Description** Remove UTSC(Upstream Triggered Spectrum Capture) Configuration**Parameters**

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string
sg-id	query	id designating a service group	Yes	string

Responses

Code	Description	Schema
202	Accepted removing UTSC configuration request	string
400	Could be malformed or incorrect query parameters	string
404	Not found UTSC entry	string
500	Internal Server Error	string

/v1/utsc-status**GET****Summary** Get UTSC Status**Description** Get UTSC(Upstream Triggered Spectrum Capture) Status

Parameters

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string
sg-id	query	id designating a service group	Yes	string

Responses

Code	Description	Schema
200	OK	main.UtscStatusForUser
404	Not found UTSC status	string
500	Internal Server Error	string

/v1/utsc/start**POST****Summary** Start UTSC with configuration**Description** Start Upstream Triggered Spectrum Capture(UTSC) for wide-band spectrum analysis.**Parameters**

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string
sg-id	query	id designating a service group	Yes	string
Configuration	body	UTSC Configuration	Yes	main.UtscConfigForUser

Responses

Code	Description	Schema
202	Accepted UTSC start request	string
400	Could be malformed or incorrect query parameters	string
500	Internal Server Error	string

/v1/utsc/stop**PUT****Summary** Stop UTSC

Description Stop UTSC(Upstream Triggered Spectrum Capture)

Parameters

Name	Located in	Description	Required	Schema
cluster-id	query	id designating a cnBR cluster	Yes	string
sg-id	query	id designating a service group	Yes	string

Responses

Code	Description	Schema
202	Accepted UTSC stop request	string
400	Could be malformed or incorrect query parameters	string
404	Not found UTSC entry	string
500	Internal Server Error	string

Models

main.IfIndexTable

Name	Type	Description	Required
cluster-id	string		No
if-index	integer		No
sg-id	integer		No
us-port	integer		No

main.PnmSessionForUser

Name	Type	Description	Required
pnm-dest-addr	string		No
pnm-dest-path	string		No
pnm-session-id	integer		No
pnm-upload-control	integer		No

main.ShelfEntry

Name	Type	Description	Required
clusterId	string		No
hostname	string		No
isMaster	boolean		No

Name	Type	Description	Required
rpdId	string		No
shelfId	string		No
shelfPid	string		No
shelfSn	string		No
slotId	integer		No

main.UtscConfigForUser

Name	Type	Description	Required
sc-cfg-aggregation-mode	integer		No
sc-cfg-aggregation-period	integer		No
sc-cfg-averaging	integer		No
sc-cfg-center-freq	integer		No
sc-cfg-num-bins	integer		No
sc-cfg-output-format	integer		No
sc-cfg-port-end	integer		No
sc-cfg-port-start	integer	Currently, we don't support cross US ports, we will specify the same value by URL parameter	No
sc-cfg-qualify-bw	integer		No
sc-cfg-qualify-center-freq	integer		No
sc-cfg-qualify-threshold	integer		No

Name	Type	Description	Required
sc-cfg-repeat-period	integer		No
sc-cfg-run-duration	integer		No
sc-cfg-span	integer		No
sc-cfg-trig-channel-index	integer		No
sc-cfg-trig-channel-type	integer		No
sc-cfg-trig-iuc	integer		No
sc-cfg-trig-minislot-count	integer		No
sc-cfg-trig-mode	integer		No
sc-cfg-trig-sid	integer		No
sc-cfg-trig-timestamp	integer		No
sc-cfg-trigger-count	integer		No
sc-cfg-window	integer		No
usc-command	integer		No
usc-sac-index	integer	Currently, we only support 0	No

main.UtscStatusForUser

Name	Type	Description	Required
sc-cfg-port-end	integer		No
sc-cfg-port-start	integer		No
usc-sac-index	integer		No
usc-status	integer		No

rpd_operation.Error

Name	Type	Description	Required
error	string		No

rpd_operation.LogLevel

Name	Type	Description	Required
Log Level	string		No

rpd_operation.Result

Name	Type	Description	Required
transaction-id	string		No

rpd_operation.SgConfig

Name	Type	Description	Required
l3-template	string		No
rpd-ip	string		No
rpd-location	object		No
rpd-mac	string		No
rpd-name	string		No
sg-template	string		No

rpd_operation.Status

Name	Type	Description	Required
status	string		No

rpd_operation.restTransactionTable

Name	Type	Description	Required
cmts-id	string		No
cmts-	string		No
name			
created-at	string		No

Name	Type	Description	Required
error-info	string		No
l3-	string		No
template			
last-state-	string		No
change			
operation	integer		No
rm-task-	string	SgConfig string json: "SgConfig"	No
id			
rpd-mac	string		No
rpd-mac-	string		No
new			
sg-id	integer	HostcnBR string json: "HostcnBR" TokencnBR string json: "TokencnBR"	No
sg-info	string		No
sg-name	string		No
sg-	string		No
template			
state	string		No
transaction-	string		No
id			

sg_cfg_canary.CanaryTransaction

Name	Type	Description	Required
canary-sg-list	string		No
canary-sg-pre-config	string		No
canary-sg-pre-status	string		No
created-at	string		No
error	string		No
l3-template	string		No
last-state-change	string		No
operation	string		No
pre-transaction	string		No
revert-canary-on-failure	boolean		No
sg-list	string		No
sg-template	string		No
sg-transactions	string		No
state	string		No
transaction	string		No
transaction-name	string		No

Name	Type	Description	Required
upgrade-all-on-success	boolean		No

sg_cfg_canary.CnbrSgs

Name	Type	Description	Required
cmts-id	string		No
sgs	[string]		No

sg_cfg_canary.Error

Name	Type	Description	Required
error	string		No

sg_cfg_canary.RequestBody

Name	Type	Description	Required
canary-sg-list	[sg_cfg_canary.CnbrSgs]		No
l3-template	string		No
revert-canary-on-failure	boolean		No
sg-list	[sg_cfg_canary.CnbrSgs]		No
sg-template	string		No
transaction-name	string		No
upgrade-all-on-success	boolean		No

sg_cfg_canary.Result

Name	Type	Description	Required
transaction	string		No

Operations Hub KPI Alert Management API

Version: 1.0

Security

AuthHeader

apiKey	<i>API Key</i>
Name In	Authorization header

/v1/alerts

GET

Summary Get the Alertmanager Alert List

Description Get the list of alerts(“firing” and/or “resolved” status) from the Alertmanager.

Parameters

Name	Located in	Description	Required	Schema
status	query	Filter alerts by status, and if status is empty will return all alerts.	No	string
limit	query	Query limit from DB.	No	integer
offset	query	Query offset from DB.	No	integer

Name	Located in	Description	Required	Schema
sort-by	query	Query sory by the parameter from DB.	No	string
order-by	query	Query order from DB.	No	string

Responses

Code	Description	Schema
200	OK	model.AlertGetEntry

/v1/alerts/groups**GET****Summary** Get the Alertmanager Alert Group List**Description** Get the list of alert groups from the Alertmanager**Responses**

Code	Description	Schema
200	OK	model.AlertGroupGetInfo

/v1/alerts/groups/{name}**GET****Summary** Get the Alertmanager Alert Group**Description** Get one alert group by group name from the Alertmanager**Parameters**

Name	Located in	Description	Required	Schema
name	path	Alert Group Name	Yes	string

Responses

Code	Description	Schema
200	OK	model.AlertGroupGetInfo

PUT**Summary** Set the Alertmanager Alert Group**Description** Set one alert group by group name to the Alertmanager.**Parameters**

Name	Located in	Description	Required	Schema
name	path	Alert Group Name	Yes	string
AlertGroup	body	Alert Group Setting	Yes	model.AlertGroupSetInfo

Responses

Code	Description	Schema
200	OK	model.AlertGroupGetInfo
400	Bad Request	string

/v1/alerts/{id}**GET****Summary** Get the Alertmanager Alert**Description** Get one alert by alert ID from the Alertmanager.**Parameters**

Name	Located in	Description	Required	Schema
id	path	Alert ID	Yes	string

Responses

Code	Description	Schema
200	OK	model.AlertGetInfo

/v1/alerts/{id}/ack**PUT****Summary** Ack the Alertmanager Alert**Description** Ack one alert by alert ID to the Alertmanager.**Parameters**

Name	Located in	Description	Required	Schema
id	path	Alert ID	Yes	string
Alert	body	Alert Ack Information	Yes	model.AlertSetInfo

Responses

Code	Description	Schema
200	OK	model.AlertGetInfo
400	Bad Request	string

/v1/loglevel**GET****Summary** Get Operation Hub KPI Alert Management Log Level;**Description** Get Operation Hub KPI Alert Management Log Level**Responses**

Code	Description	Schema
200	OK	model.LogLevel

PUT**Summary** Set Operations Hub KPI Alert Management Log Level**Description** Set Operations Hub KPI Alert Management Log Level**Parameters**

Name	Located in	Description	Required	Schema
LogLevel	body	Log Level	Yes	model.LogLevel

Responses

Code	Description	Schema
200	OK	model.LogLevel
400	Bad Request	string

/v1/smtp**GET****Summary** Get the Alertmanager SMTP Configuration**Description** Get the configuration for SMTP that is used to forward alerts for notifications.**Responses**

Code	Description	Schema
200	OK	model.AlertConfigGetInfo

PUT**Summary** Set the Alertmanager SMTP Configuration**Description** Set the configuration for SMTP so that alertmanager can forward alerts for notifications through the configured SMTP server.**Parameters**

Name	Located in	Description	Required	Schema
Config	body	Alertmanager SMTP Configuration	Yes	model.AlertConfigSetInfo

Responses

Code	Description	Schema
200	OK	model.AlertConfigGetInfo

Code	Description	Schema
400	Bad Request	string

Models

model.AlertConfigGetInfo

Name	Type	Description	Required
auth-identity	string		No
auth-password	string		No
auth-secret	string		No
auth-username	string		No
create-time	string		No
from	string		No
hello	string		No
host	string		No
require-tls	boolean		No
update-time	string		No

model.AlertConfigSetInfo

Name	Type	Description	Required
auth-identity	string		No
auth-password	string		No
auth-secret	string		No
auth-username	string		No
from	string		No
hello	string		No
host	string		No
require-tls	boolean		No

model.AlertGetEntry

Name	Type	Description	Required
alerts	[model.AlertGetInfo]		No
limit	integer		No
offset	integer		No
total	integer		No

model.AlertGetInfo

Name	Type	Description	Required
acked	boolean		No
acked-time	string		No
alert-group	string		No
alert-name	string		No
cnBR	string		No
comment	string		No
create-time	string		No
creator	string		No
description	string		No
end-time	string		No
expire-time	string		No
id	string		No
severity	string		No
start-time	string		No
status	string		No
summary	string		No
update-time	string		No

model.AlertGroupGetInfo

Name	Type	Description	Required
alert	[string]		No
create-time	string		No
enabled	boolean		No
name	string		No
sendto	[string]		No
update-time	string		No

model.AlertGroupSetInfo

Name	Type	Description	Required
enabled	boolean		No
sendto	[string]		No

model.AlertSetInfo

Name	Type	Description	Required
acked-time	string		No
comment	string		No
creator	string		No

Name	Type	Description	Required
expire-time	string		No

model.LogLevel

Name	Type	Description	Required
Log Level	string		No

Operations Hub KPI Management API

Version: 1.0

`/api/clusterkpi/health`

GET

Summary Top level health kpi query

Parameters

Name	Located in	Description	Required	Schema
verbose	query	A flag to show detail response for debug	No	boolean
time	query	Timestamp in rfc3339 or unix_timestamp format, only for instant query	No	string
start	query	Start timestamp in rfc3339 or unix_timestamp format	No	string
end	query	End timestamp in rfc3339 or unix_timestamp format	No	string
step	query	Query resolution step width in duration format (e.g. 5s) or float number of seconds.	No	string

Name	Located in	Description	Required	Schema
params	query	additional query condition	No	object

Responses

Code	Description
200	1 is healthy, 0 is unhealthy, -1 is no data available
400	User input error
500	Internal error

/api/clusterkpi/health/{folder}

GET

Summary Detail health kpi query

Parameters

Name	Located in	Description	Required	Schema
folder	path	kpi metric path	Yes	string
verbose	query	A flag to show detail response for debug	No	boolean
time	query	Timestamp in rfc3339 or unix_timestamp format, only for instant query	No	string
start	query	Start timestamp in rfc3339 or unix_timestamp format	No	string
end	query	End timestamp in rfc3339 or unix_timestamp format	No	string
step	query	Query resolution step width in duration format (e.g. 5s) or float number of seconds.	No	string

Responses

Code	Description
200	1 is healthy, 0 is unhealthy, -1 is no data available
400	User input error
500	Internal error

