#				Identification II	D client	Server	Method	synchronous	URI	URI example
type	gro	up	interface					/		
	1	Processing request	2 Getting list of operational	state 000102	host system	MFC/FC	GET	synchronous	/v1/operations	/v1/operations
0 common	ľ	Trocossing request	3 Getting information of det operation state	ooo103	host system	MFC/FC	GET	synchronous	/v1/operations/{operation_id}	/v1/operations/1234567890123
		Controller status confirmation	1 Getting controller state	000201	host system	MFC/FC	GET		/v1/MSFcontroller/status	/v1/MSFcontroller/status
	3	Controller log	Getting controller log Registering equipment info	000301 ormation 010101	host system host system	MFC/FC MFC/FC	GET POST	synchronous synchronous	/v1/operations/log /v1/equipment-types	/v1/operations/log /v1/equipment-types
	١. ا	Equipment-type information	Getting equipment list in a		host system	MFC/FC	GET		/v1/equipment-types	/v1/equipment-types
	l'	management	2 cluster 3 Getting equipment informa	ation 010103	host system	MFC/FC	GET	synchronous	/v1/equipment-types/{equipment_type_id}	/v1/equipment-types/10
	Ш		4 Deleting equipment inform	nation 010104	host system	MFC/FC MFC	DELETE	synchronous	/v1/equipment-types/{equipment_type_id}	/v1/equipment-types/10
	2	Switch-cluster management	1 Adding Switch-cluster 2 Getting list of Switch-clus	010201 ster 010202	host system host system		GET	asynchronous		/v1/clusters /v1/clusters
	_	Switch-cluster management	3 Getting information of Sw		host system	MFC/FC	GET	svnchronous	/v1/clusters/lcluster idl	/v1/clusters/1
	3	Node information	4 Deleting Switch-cluster 1 Getting list of nodes	010204 010301	host system host system	MFC/FC	DELETE		/v1/clusters/[cluster_id] /v1/clusters/[cluster_id]/nodes	/v1/clusters/1 /v1/clusters/1/nodes
			1 Adding Leaf- node	010401	host system	MFC/FC MFC/FC	POST	asynchronous	/v1/clusters/[cluster_id]/nodes/leafs	/v1/clusters/1/nodes/leafs
	4	Leaf management	2 Getting list of Leaf-nodes 3 Getting information of Lea		host system host system	MFC/FC	GET	synchronous	/v1/clusters/fcluster idl/nodes/leafs /v1/clusters/fcluster idl/nodes/leafs/fnode idl	/v1/clusters/1/nodes/leafs /v1/clusters/1/nodes/leafs/1
			4 Deleting Leaf-node	010404	host system				/v1/clusters/cluster idl/nodes/leafs/fnode idl	/v1/clusters/1/nodes/leafs/1
	H		5 Updating Leaf-node 1 Adding Spine-node	010405 010501	host system host system		POST		/v1/clusters/[cluster.id]/nodes/leafs/[node.id] /v1/clusters/[cluster.id]/nodes/spines	/v1/clusters/1/nodes/leafs/1 /v1/clusters/1/nodes/spines
	_	Spine management	2 Getting list of Spine-node		host system	MFC/FC	GET		/v1/clusters/[cluster_id]/nodes/spines	/v1/clusters/1/nodes/spines
	э	Spine management	3 Getting information of Spi 4 Deletting Spine-node	010504	host system host system	MFC/FC	DELETE	asynchronous	/v1/clusters/[cluster_id]/nodes/spines/[node_id] /v1/clusters/!cluster idl/nodes/spines/[node_id]	/v1/clusters/1/nodes/spines/1 /v1/clusters/1/nodes/spines/1
	Ш									
	6	RR (BGP Route Reflector) management								
			4 Getting list of RR-node 5 Getting infromation of RR	010604 -node 010605	host system host system	MFC/FC MFC/FC	GET		/v1/clusters/[cluster_id]/nodes/rrs /v1/clusters/[cluster_id]/nodes/rrs/[node id]	/v1/clusters/1/nodes/rrs /v1/clusters/1/nodes/rrs/1
	7	Interface information	 Gettinig list of interfaces 	010701	host system	MFC/FC	GET	svnchronous	/v1/clusters/fcluster idl/nodes/ffabric tvpel/fnode idl/interfaces	/v1/clusters/1/nodes/leafs/1/interfaces
		Interface management (Physical	1 Getting list of physical int 2 Getting information of phy		host system host system		GET		/v1/clusters/[cluster idl/nodes/[fabric type]/[node idl/interfaces/physical-ifs /v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-	/v1/clusters/1/nodes/leafs/1/interfaces/physical-ifs /v1/clusters/1/nodes/leafs/1/interfaces/physical-ifs/1
Underlay	Ľ	interface)	3 Updating physical interfac	e 010803	host system	MFC/FC MFC/FC	PUT		/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical- /v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-	/v1/clusters/1/nodes/leafs/1/interfaces/physical-ifs/1 /v1/clusters/1/nodes/leafs/1/interfaces/physical-ifs/1
Management			1 Creating or deleting break	out 010901	host system	MFC/FC	PATCH	asynchronous	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/breakout-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/breakout-ifs
	9	Interface management (Breakout interface)	interface 2 Getting list of breakout in	terfaces 010902	host system	MFC/FC	GET	synchronous	/v1/clusters/fcluster.idl/nodes/ffabric.typel/fnode.idl/interfaces/breakout-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/breakout-ifs
		interiace)	3 Getting information of bre	akout 010903	host system	MFC/FC	GET	synchronous	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/breakout-	/v1/clusters/1/nodes/leafs/1/interfaces/breakout-ifs/1-1
	H	Interface management (Internal-	interface 1 Getting list of internal-lini	k 011001	host system	MFC/FC	GET		ifs/lbreakout if idl /v1/clusters/lcluster idl/nodes/lfabric typel/lnode idl/interfaces/internal-link-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/internal-link-ifs
	10	link interface)	getting information of inte		host system	MFC/FC	GET	synchronous	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/internal-link-	/v1/clusters/1/nodes/leafs/1/interfaces/internal-link- ife/1
	H		interface Creating Link-aggregation	interface 011101	host system	MFC/FC	POST	asynchronous	ifs/[internal_link_if_id] /v1/clusters/[cluster id]/nodes/[fabric_tvpe]/[node_id]/[interfaces/[ag-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/lag-ifs
			Getting list of Link-aggreg	gation 011102	host system	MFC/FC	GET	synchronous	/v1/clusters/fcluster idl/nodes/fabric typel/fnode idl/interfaces/lag-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/lag-ifs
		Interface management (Link aggregation interface)	interfaces Getting information of Lin		host system	MFC/FC	GET	· .		
		aggregation interface)	aggregation interface	011103	nost system	MFG/FG	GET	synchronous	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/lag_ifs/{lag_if_id}	/v1/clusters/1/nodes/leafs/1/interfaces/lag-ifs/1
			5 Deleting Link-aggregation	interface 011105	host system	MFC/FC	DELETE	asvnchronous	/v1/clusters/{cluster_id}/nodes/{fabric_type}/[node_id]/interfaces/lag_ifs/{lag_if_id}	/v1/clusters/1/nodes/leafs/1/interfaces/lag-ifs/1
			1 Creating inter-cluster link	interface 011201	host system	MFC/FC	POST	asynchronous	/v1/clusters/[cluster_id]/interfaces/cluster-link-ifs	/v1/clusters/1/points/cluster-link-ifs
	12	Interface management (Inter-	2 Getting list of inter-cluste interfaces	er link 011202	host system	MFC	GET	synchronous	/v1/clusters/[cluster_id]/interfaces/cluster-link-ifs	/v1/clusters/1/points/cluster-link-ifs
	12	cluster link interface)	3 Getting information of inte	er-cluster 011203	host system	MFC	GET	synchronous	/v1/clusters/{cluster id}/interfaces/cluster-link-ifs/{cluster link if id}	/v1/clusters/1/points/cluster-link-ifs/1
			Iink interface 4 Deleting inter-cluster link		host system	MFC/FC	DELETE	asynchronous	/v1/clusters/{cluster idl/interfaces/cluster-link-ifs/ {cluster link if id}	/v1/clusters/1/points/cluster-link-ifs/1
				011401		MFC/FC	DOOT			
		51	1 Creating edge-point 2 Getting list of edge-points		host system host system	MFC/FC	GET	synchronous	/v1/clusters/(cluster_id)/points/edge-points /v1/clusters/(cluster id)/points/edge-points	/v1/clusters/1/points/edge-points /v1/clusters/1/points/edge-points
	14	Edge point management	3 Getting infromation of eds	ze-point 011403	host system		GET	synchronous	/v1/clusters/fcluster idl/points/edge-points/fedge point idl	/v1/clusters/1/points/edge-points/1
	Н		4 Deleting edge-point	011404	host system	MFC/FC MFC/FC		1	/v1/clusters/[cluster_id]/points/edge-points/[edge_point_id]	/v1/clusters/1/points/edge-points/1 /v1/slices/l2vnn
			1 Creating Slice	020101	host system		POST	synchronous	/v1/slices/{slice_type}	/v1/slices/l3vpn
			2 Changing Slice	020102	host system	MFC/FC	PUT	asynchronous	/v1/slices/{slice_type}/{slice_id}	/v1/slices/l2vpn/1 /v1/slices/l3vpn/100
	1	Slice	3 Deleting Slice	020103	host system	MFC/FC	DELETE	synchronous	/v1/slices/fslice typel/fslice idl	/v1/slices/l2vpn/1
			-					-		/v1/slices/l3vpn/100 /v1/slices/l2vpn/1
			4 Getting information of Slice		host system	MFC/FC	GET	synchronous	/v1/slices/{slice_type}/{slice_id}	/v1/slices/l3vpn/100
			5 Getting list of Slices	020105	host system	MFC/FC	GET	synchronous	/v1/slices/{slice_type}	/v1/slices/l2vpn /v1/slices/l3vpn
Overlay	П		1 Creating or deleting CP	020201	host system	MFC/FC	PATCH	asynchronous	/v1/slices/{slice_type}/{slice_id}/cps	/v1/slices/I2vpn/1/cps
Management 2			T Ordating or dolotting or					,	, and the second	/v1/slices/l3vpn/100/cps
			2 Creating CP	020202	host system	MFC/FC	POST	asynchronous	/v1/slices/{slice_type}/{slice_id}/cps	/v1/slices/l2vpn/1/cps /v1/slices/l3vpn/100/cps
										/v1/slices/12vpn/1/cps/1
	2	CP	3 Changing CP	020203	host system	MFC/FC	PUT	asynchronous	/v1/slices/{slice_type}/{slice_id}/cps/{cp_id}	/v1/slices/l3vpn/100/cps/10
			4 Deleting CP	020204	host system	MFC/FC	DELETE	asynchronous	/v1/slices/{slice_type}/{slice_id}/cps/{cp_id}	/v1/slices/12vpn/1/cps/1 /v1/slices/13vpn/100/cps/10
			5 Getting information of CP	020205	host system	MFC/FC	GET	svnchronous	/v1/slices/fslice typel/fslice idl/cps/fcp idl	/v1/slices/I2vpn/1/cps/1
			6 Getting lists of CP	020206	host system	MFC/FC	GET	synchronous	/v1/slices/{slice_type}/{slice_id}/cps/	/v1/slices/12vpn/1/cps /v1/slices/13vpn/100/cps
	Ш		7 Creating or deleting static	route 020207	host system	MFC/FC	PATCH	asynchronous	/v1/slices/fslice typel/fslice idl/cps/fcp idl	/v1/slices/l3vpn/100/cps/1
			2 Getting list of IF traffic	030102	host system	MFC/FC	GET	synchronous	/v1/traffic/clusters/lcluster.idl/nodes/lfabric.tvpel/lnode.idl/interfaces	/v1/traffic/clusters/1/nodes/1/interfaces
Traffic			3 Getting list of IF traffic	030102	host system	MFC/FC	GET	synchronous	/v1/traffic/clusters/icluster.idl/nodes/ifabric_type]/[node.idl/interfaces/[if_type]/	/v1/traffic/clusters/1/nodes/1/interfaces /v1/traffic/clusters/1/nodes/1/interfaces/physical-ifs/1
3 Information	1	Traffic information							lif id	
			4 Getting list of CP traffic	030104	host system	MFC/FC	GET	synchronous	/v1/traffic/slices/[slice_type]/[slice_id]/cps	/v1/traffic/slices/l3vpn/1/cps
	Ц		5 Getting CP traffic	030105	host system	MFC/FC	GET	synchronous	/v1/traffic/slices/{slice_type}/{slice_id}/cps/{cp_id}	/v1/traffic/slices/I3vpn/1/cps/1
5 Fault detection	1	Failure detection	1 Getting list of failures	050101	host system	MFC/FC	GET	synchronous	/v1/failures/failure_status	/v1/failures/failure_status
					1	1	L	1		

The response code list returned to MSF host system is shown below.

For the sake of simplicity, 400, 404, 409 for the response code originating from the client, and 500 for the response code attributed to the server. It may be possible that the library you are using returns code other than the above, but it is not stipulated here.

Class	Resp	onse code	Reques				Overview	Other codes to include in the re
			18091	GET	PUI	DELETE		
	200	OK	0	0	0	_	Successful resource acquisition, or resource update or processing request by	-
rmal raanar	201	Created	0	_	_	_	When resource creation succeeds	-
rmal respor	202	Accepted	0	_	0	_	When acceptance of processing is successful by asynchronous processing	-
	204	No Contents	_	_	_	0	When the resource deletion is successful	-
								401 Unauthorized
								402 Payment Required
								403 Forbidden
								405 Method Not Allowed
	400	B . B .				_	MII	406 Not Acceptable
	400	Bad Request	O	0	0	0	When the data format is incorrect	408 Request Timeout
I .								412 Precondition Failed
ormal respo	1							413 Request Entity Too Large
								414 Request-URI Too Large
								415 Unsupported Media Type
	404	Not Found	0	0	0	0	When it is desired to hide that the operation target resource does not exist or	-
	409	Conflict	0	_	0	0	If there is already a resource you want to create or the operation target resou	-
I	EOO	It		\sim	0	\circ	Described and the continued day to see this	501 Not Implemented
	500	Internal Server Error	0	0)	0	Processing can not be continued due to server origin.	503 Service Unavailable

When an error occurs, the error code list of MFC / FC to be set in the response body is shown below.

The error code shall be a character string consisting of 2 digits of "obstification code" indicating the major classification of the error and 4 digits of "detailed code" indicating the detailed cause of the error, total of 6 digits.

(Example C1824A) of 1 be the classification code, 2348 is the detailed code)

	Mai	ior classification			Small classification			Response information				
								I		In the	aluetas	Matching sta
	code	Overview	code	Overview	Supplement	Error code	Status code	Error message	remarkss	FC	EC/EM	
Common	00	System error	0001	System status error	A control request in a state where a request can not be accepted	000001	500	System status error.	8	0	-	Matching
		•		Process cancellation	Depending on the state of the system, the process is canceled	000002	500	Operation canceled.	-	0	-	Matching
	01	Parameter error	0001	Parameter analysis error	Parameter analysis failure	010001	400	Parameter format error.	-	0	ı	Matching
			0002	Parameter set value error	The value set for the parameter is invalid	010002	400	Parameter value error.	-	0	-	Matching
			0003	Parameter setting range error	The value specified by the parameter is out of the prescribed range	010003	400	Parameter value out of range.	-	0		Matching
	02	DB control error	0001	DB access error	Connection error with DB	020001	500	Database connection error.	-	0		Matching
				SQL execution error	When SQL execution fails	020002	500	Database operation error.	When data control / acquisition processing on DB	0	_	Matching
				DB exclusion control error	When it is impossible to acquire the exclusive right by the row of the DB or the table lock	020003	409	Exclusive control error.	If it can not be acquired even after a predetermined number of retries	0	-	Matching
					When the DB transaction process fails	020004	500	Database transaction error.	-	0		Matching
	03				There is no information of the control target specified by the parameter of REST	030001	404	Target resource not found.	When changing resources / acquiring / deleting			Matching
		error			The information of the control target specified by the parameter of REST already exists	030002	409	Target resource already exist.	Resource generation request	_ 0		Matching
			0003	Related information acquisition error	There is no information necessary for the control specified by the parameter	030003	500	Related resource not found.	Occurs when a slice ID specified by a URI is upperistered at the time of CP reperation	0	-	Matching
			0004	Information registration error	When data registration fails	030004	500	Regist information error.	When data control process on memory fails	0	-	Matching
					When data update fails	030005	500	Update information error.	When data control process on memory fails	0	-	Matching
					When data deletion fails	030006	500	Delete information error.	When data control process on memory fails	Ö	-	Matching
				State transition condition error	When the state after the control and the current state can not be transitioned	030007	500	Transition status error.	The slice / CP in the slice management and the state transition of the device / IF in the configuration management, etc.	Ö	1	Matching
	04	File error	0001	File read error	Failed to open reading file	040001	500	File read error.	-	0	_	Matching
		THE CITE	0001	File creation error	Failed to open file for writing	040002	500	File write error.	_	ŏ	_	Matching
			0002	Executable file error	Failed to execute external executable file	040003	500	Execute file error.	_	Ö		Matching
				File delete error	Failed to delete the file	040003	500	File delete error.		ŏ		Matching
	05	EC control error	0001	Connection error	Connection to control target EC failed	050001	500	EC connection error.	_		0	Matching
	0.5	EG control error		Control error	Contribution to Odition anget Co tasks Failed to control the control target EC	050002	500	EC control error.	-	-	ŏ	Matching
	06	FC control error		Control timeout Connection error	Control timeout to control target EC occurred Connection to control target FC failed	050004 060001	500 500	EC control timeout. FC connection error.	-	<u>-</u>	0	unknown Matching
	00	10 00100101101		Control error	Control of the control target FC failed. However, EC / EM / device status has been rolled back.	060002	500	FC control error.	_	0		Matching
				Control timeout	Control timeout to control target FC occurs	060003	500	FC control timeout.	-	Ö	-	unknown
		Cluster control error	0001	Cluster control error	When there is a cluster in which at least one error has occurred in the control target cluster.	300001	500	Cluster control error.	Regardless of whether the request target cluster is one or more, the MFC notifies this error to the host system when an error occurs.	_	-	Match / mismatch / unknown
Mismatch	90	System inconsisten	0001	FC / EC control error (EM controlled)	EM has succeeded in control, but when an error occurs in the DB reflection of EC / FC	900001	500	FC, EC control error. (EM control completed.)	-	0	0	Mismatch
i			0002	FC control error (EC, EM controlled)	Although EC and EM succeeded in control, when an error occurred in DB reflection in FC	900002	500	FC control error. (EC, EM control completed.)	-	0	-	Mismatch
Ī			0003	EC control error (FC, EM controlled)	EM has succeeded in control but when an error occurs in the DB reflection in EC	900003	500	EC control error. (FC, EM control completed.)	Move error code of previous year '050004' to intersystem inconsistency error	-	0	Mismatch
			0004	FC control error (EC controlled)	Although the EC succeeded in control, when an error occurred in the DB reflection in EC (Error code that occurs in cases where control to EM (device) does not occur)	900004	500	FC control error. (EC control completed.)	Model registration / deletion is applicable	0)	Mismatch
			0005	MFC control error (FC, EC, EM controlled	Although it succeeded in controlling FC, EC, EM of all clusters, when an error occurred in DB refle	900005	500	MFC control error. (FC, EC, EM control completed	-	-	-	Mismatch
					When FC and EC control of all clusters succeeded, but an error occurred in MFC DB reflection (Error code generated in the case where control to the EM (apparatus) does not occur)	900006	500	MFC control error. (FC, EC control completed.)	Model registration / deletion is applicable	-	ı	Mismatch
			0007		DB reflection	900007	500	MFC control error. (FC control completed.)	Slice generation / deletion is applicable Also, even when there is no CP on the relevant	-	-	Mismatch
					(Error code generated in the case where control to EC or EM (apparatus) does not occur)				slice in slice change			
Other	99	Other		Unexpected error	(Error code generated in the case where control to EC or EM (apparatus) does not occur)	990001	500	Undefined error.	slice in slice change - When requested by the RA for system triggering to	0	_	unknown Matching

^{* 1} In the cluster control error, although MFC is generated in the sense that error occurs in each cluster, it is checked the control result of each cluster and it is detected that this error occurred.

■ Usage policy of request operation type of interface
The usage policy of the request operation type of each interface is as follows.

The usage p	olicy of the request operation type of each interface is as follows.	
Request operation type	Target operation	Assumed response code *
POST	·It is used when the server side pays out an ID and creates a new resource	201 (Created): Successful resource creation (return ID which was paid out as response body) 202 (Accepted): Request reception (asynchronous processing)
PUT	\cdot It is used when the client specifies an ID and creates a new resource. \cdot It is used for updating generated resources.D21	· 200 (OK): Resource update succeeded · 201 (Created): Resource creation succeeded · 202 (Accepted): Reguest reception (asynchronous processing)
DELETE	· It is used to delete resource information.	· 204 (No Content): Resource delete successful
GET	· It is used to acquire resource information.	· 200 (OK): Successful resource acquisition
PATCH	· Use for simultaneous request (new creation / deletion / update) of multip	200 (OK): Resource update succeeded 201 (Created): Resource creation succeeded 202 (Accepted): Request reception (asynchronous processing) 204 (No Content): Resource delete successful

^{*} According to the policy of the response code list, the response code at the time of error returns one of 400, 404, 409, 500

■ About the control type (action) parameter
In part of the interface, there is an interface for setting the control type parameter in the body part.
Considering that the number of URIs increases and becomes complicated, the same URI is used for requests to operate the same resource, and the policy is to control processing by control type parameter.

Type definition	Table 1	1 Format of body part de	finition				only for array elements owing patterns also exist	
The element shall be of the following data type.	Body					Nullable	Empty array allowar	ce
String (string)	param_s	string1	st	ring C)	×		N ∠
· Number (number, integer)	param_s	string2		ring C		0		י ע
Boolean	param_a	array1		ring[] C)	Ō	×	
· Array (array)	param_a	array2		ring[]		×	0	→
· Object (object)	param_a			ring[]		0	0	ע
· Null (null)	param_c	object1		oject[] C		×	×	ח
		paramA		ring C)	0		
		paramB		ring >		0		
	param_c			oject[] >		0	0	1
		paramC		ring (0		
		paramD	st	ring)	0		V
			(ON Notation				
			["param_string1" : "", "param_string2" : nu		← Empty ← null	string		
1-2. About erray An element that sets multiple values for one element is expressed as an array Treat "empty array" which is an array but has no value at all as one piece of inform % However, only elements whose "empty array allowance" is "O" can be set Empty array and rull are treated destinctly % null can only set elements whose "nullable" is "O"	n		"param_string1": "" "param_string2": nu Figure 1 Example of JS ["param_array1": [" "param_array2": 1]	ON Notation		-1	Fwo values in the array impty array uull	

→ The essential element setting of the child element is adapted
→ Required element setting of child element is not adapted

(Does not exist = parent element is omitted or is empty array or null)

Object declaration
 First array value (param B is null)
 Second array value (param B is element omitted)

ption of the case where the usage method between the higher system - MFC / FC and MFC - FC is different.

Depending on the interface, there are cases where the definition of the parameter specified when the MFC are different.
For such interfaces, we shall describe each interface is follows.

Whether the parameters are specified or not
 If there are request parameters that are not supposed to be specified from the host system,
 Describe that it will not be specified in the remarks solumn as in the example in the table below.

message	code	body	Type	Required	Nullable	Empty array allowance	Overview	remarkss
request	-	param_string1	string	0	×		Parameter overview	[Parameters not shown to the top]

]. "param_object2" : null

neter mandatory · Null allowable · Empty array tolerance handling is different.
When the request is mandatory, mandatory, muldable, empty array permissible in case of MFC / FC from Master / FC and MFC to FC,
for the mandatory, nullable, empty array plowable columns, restrictions on request from the host system to the MFC / FC shall be described.
If the constraint on request from MFC to FC differs from the request from MFC / FC from higher system,
that fact shall be stated in the remarks column as follows.

messa	age	code	body	Туре	Required	Nullable	Empty array allowance	Overview	remarkss
reque	st	-	param_string1	string	0	×	/		[Restriction for MFC-FC] Required: ×, nullable: O

3. When the specifiable values of the parameters are different.

In the case of requesting from MFC / FC to MFC / FC, when requesting from MFC to FC, if the settable values of the parameters are different, the values that can be specified in each case shall be described in the remarks column as follows.

message	code	body	Type	Required	Nullable	Empty array allowance	Overview	remarkss
request	-	param_string1	string	0	×		Parameter overview	[Setting value for higher system] *Abc : XXXXX *Def: XXXXX Setting value between MFC and FC] *Abc : XXXXX *Omi: XXXXXX *Omi: XXXXXX *Omi: XXXXXXX *Omi: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

message	code	body	Type	Required	Nullable	Empty array allowance	Overview	remarkss
response	204	param_string1	-	-	×		Parameter overview	[Response code not shown to the top]

URI options for asynchronous request are shown below.

 $\begin{tabular}{ll} \hline For requests whose operation type is asynchronous, the parameters shown in this section are set as URI options. \\ \end{tabular}$

Optional parameters	type	required	overview	remarkss
notification_address	string	0	Operation completion notification address	-
notification_port	string	0	Operation completion notification destination port	_

[Option parameter specification for URI]

- 11	JRI	/xxxx?notification address=192.168.100.10¬ification port=65000
- 11	JRI	//xxxx?notification address=192.168.100.10¬ification port=65000
- 11	J 1 12	/ XXXX: No cinocator_addroso

The response format when an error occurs is shown below.

message	code	body	type	required(Allow nul	Allow empty array	overview	remarkss
		error_code	string	0	×		A value that represents details of an error	Refer to the table below for the format
		error_message	string	0	×		Failure cause (exception message)	-
		-		0	×		Data integrity state	By this error occurrence, it indicates whether the data has returned to the pre-request state, returned to the requested state, or inconsistent state. MFC case: data consistency between clusters In the case of FC: data consistency between CTLs / devices in the cluster Returned to the pre-request state: "rolled back" Transited to post-request state: "updated" Inconsistent state: "not consistent" Unknown state: "unknown"
response	※ 1	target_clusters	object[]	×	O ×	0	All cluster information requested Cluster ID to be processed	For MFC: When an error occurs in FC, set this parameter. Returning the status of all clusters, including the cluster in which no error occurred. For FC: This parameter can be omitted
		cluster_id	string	0	х		Cluster ID to be processed	
		request_results	string	0	×		Request result	Responds to the request for each cluster unit. Success: "success" Failure: "failed"
		error_code	string	×	0	/	A value that represents details of an error	Responds when the request result of the processing target cluster is failed. Refer to the table below for the format
		error_message	string	×	0		Failure cause (exception message)	Responds when the request result of the processing target cluster is failed
		data_consistency	string	0	×		Data integrity state	Indicates the matching state of data between CTLs / devices in the cluster due to error occurrence. Returned to the pre-request state: "rolled back" Transited to post-request state: "updated" Inconsistent state: "not consistent" Unknown state: "unknown"

	Getting list of operational state
Method	GET

URI option	type	required	overview	remarkss
format	string	-	Output format	"list": get list information "detail-list": get detailed list information When omitted, it returns the same result as the one with "list" specified.

[list]

URI	/v1/operations
UKI	/v1/operations?format=list

message	code	body	type	required	null	empty array	overview	remarks		
request	-	_	-	-	-	-	-	-		
roononoo	200	operation_ids	string[]	Υ	N	Υ	Operation ID	-		
response	Refer to the "Error response format" sheet for error response									

Body uses JSON format.

[detailed list]

IRI		/ V	і / Орсі	rations?format=de	call list					
nessage	code	boo	dv.		type	required	البيما	empty array	Toyon iny	remarks
equest	_	_	лy		Lype _		riuli _	_	I_	I_
quest		_			-h:4[]	V	N	V		
		ope	eration		object[]	Y	N	<u> </u>	Operation ID	_
				tion_id red_time	string	Y	N	$\overline{}$	Occurrence time	format is "YYYYMMDD hhmmss"
			occur	rea_ume	string	ļī.	IN	$\overline{}$	Occurrence time	When the status is in the completed state, the
						Υ	N		Last update time	completion time is stored.
			iast_u	pdate_time	string	ľ	IN		Last update time	format is "YYYYMMDD_hhmmss"
						-				"unexecuted": Unexecuted
										"executing": Running
			status	_	string	Υ	N		status	"completed": completed
			Status	•	String	'	IN		status	"failed": failed
										"canceled":System dependent execution cancellati
						1				As required, each function stores the detailed state
			sub_st	tatus	string	N	Υ		sub_status	"executing".
			reque	ct	object		N		Request information	executing .
			uri		string	<u>'</u>	N		Request URI	_
			un		String	+'	1.4		Trequest ord	"POST"
										"PUT"
										"DELETE"
			me	ethod	string	Υ	N		Request method	"PATCH"
										※ Only operations that can be asynchronous can be
										specified
			respo	nse	object	N	Υ		Response information	Required when status is "completed" or "failed"
			Toopo	1100	OBJOOL	+'`			Tresponde información	Set the value with the same policy as REST respon
			st:	atus_code	int	Y	N		Process result information	code
						1.			Trocos result information	Example: 200 = OK
									Cluster unit request/response in multi	Optional for FC
		ľ	target_clusters		object□	N	Υ	Υ	cluster	Spannar to 1 S
	200		cluster id		string	Υ	N		Cluster ID of the request destination	-
sponse				quest	object	Y	N		Request information	-
				uri	string	Υ	N		Request URI	-
									·	"POST"
										"PUT"
				and the state of		Y	N		Request method	"DELETE"
				method	string	ľ	IN		Request method	"PATCH"
										X Only operations that can be asynchronous can b
										specified
				sponse	object	N	Υ		Response information	-
				status_code	int	N	Υ		Response code	
			rollba	cks	object	N	Υ		Rollback information	Optional for FC
										success: "completed",
			res	sult	string	Υ	N		Rollback processing result	failure: "failed"
										none:"none"
	1			curred_time	string	Υ	N		Rollback start time	-
	1		taı	rget_clusters	object□	N	Υ	Y	Cluster information	ロールバック対象がいないケースでは設定されない
	1			cluster_id	string	Υ	N		Cluster ID	-
	1			request	object	Y	N	_	Request information	-
	1			uri	string	Υ	N		Request URI	- "P007"
	1									"POST"
	1									"PUT"
	1			method	string	Υ	N		Request method	"DELETE"
	1								1 ·	"PATCH"
	1									Only operations that can be asynchronous can be
	1				1	- L		_ \		specified
	1			response	object · ·	N	Y	_	Response information	_
		1	1	status code	int	N	ΙÝ		Response code	

Interface	Getting information of detailed operation state
Method	GET

URI parameter	type	overview	remarkss
operation_id	string	Operation ID	-

URI /v1/operations/{operation_id}

sub_atabas string N N sub_atabas A required, each function stores the discrete A required, each function stores the discrete A required A required, each function stores the discrete A required		code	body		type	required	null	empty array	overview	remarks
Secured test set store. Y. N. Concernation the Secure of the Set set on the combination of the Set set of the set of t	equest -		_		-	- V	- N	-		-
act update, time						Y		Y		format is "VVVVMMDD bloomes"
set yellowing time string V N string V N status competed time to compete time is abord time to string V N status control of time to string V N status control o			occu	rrea_time	string	1	IN	$\overline{}$	Occurrence time	
status eting Y N status Concentral Theoretical Concentral Planning Status at the status at ting N N status Status Account Stat			last_u	update_time	string	Υ	N		Last update time	completion time is stored.
sub_atabas string N N sub_atabas A required, each function stores the discrete A required, each function stores the discrete A required A required, each function stores the discrete A required			statu	ıs	string	Y	N		status	"unexecuted": Unexecuted "executing": Running "completed": completed "failed": failed
request diplect V Y N Request DRIS POST POUT POUT POUT POUT POUT POUT POUT POU			sub_s	status	string	N	N		sub_status	"canceled": System dependent execution cancellation As required, each function stores the detailed state of
unt string V N Request method POST POST POST POST Supports and processing and pro					_	V	V	$\overline{}$		executing .
method string V N Request method "POST" TPUT" TSUT TO STRING TO N Request method "POST" TO STRING TO N Request body part "Reponse information and can be asynchroling to the control of th						Y				- -
Body string Y N Response information Service deputation marked from the special processing Service S						Y				"PUT" "DELETE" X Only operations that can be asynchronous can be
response status code int. Y N Process result information Set the value with the same policy as food code code code code code code code c			bo	ody	string	Y	N		Request body part	information ※ For double quotation marked from the original, it is
status, code Int V N Process result information Set the value with the same policy as I code code code code code code code code			rocne	onco	object	NI	V	$\overline{}$	Pagnanca information	Paguired when status is "appropriated" or "failed"
body string Y N Response body part Selection to secure different part of the body part, it is an empty string. The created object, it is on empty string. Y N Request the formation — Request the formation — Request the request destination — Request body part — Response information — Response information — Response information — Response body data at rollback — Response request — Response request — Request the request — Request repeated by request — Request repeated by replaced by control of relibeack for dulaters — Request repeated by replaced by control of relibeack for dulaters — Request repeated by replaced by control of relibeack for dulaters — Request repeated by replaced by control of relibeack for roll object in the request repeated by replaced by control of response repeated by replaced by control of re									•	Set the value with the same policy as REST response code
Couster id string Y N Cluster ID of the request destination - request depletination - Request URI - POST PUT "PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI POST PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI PUT" The put of the request destination - Request URI PUT" The put of the request URI PUT" The put of the request destination - Request URI PUT" The put of the request URI PUT" The put of the request destination - Put of the request URI PUT" The put of the request Destination - Put of the request Put of the Pu			bo	ody	string	Υ	N		Response body part	created for each processing. **Basically it assumes the json format, but for double quotes, it is assumed to be replaced by **I* and stored. **In the IF case where information is not placed on the body part, it is an empty string. The created object id to be included in the response of the POST request, The message corresponding to the processing failure
Cluster id string Y N Request information			targe	et clusters	obiect∏	N	Υ	Υ	Cluster unit request/response in multi cluster	Optional for FC
request object Y N Request Information - POST* POST* PUT* P			_							
Post						Y V		$\overline{}$		_
method string Y N Request method "POST" (PUT" (PUT) (PUT" (PUT) (P			10			Y				<u>-</u>
body string Y N Request body part created for each processing. Seasically it assumes the join format quotes, it is assumed to be replaced by stored. String information is response object N Y Response information ————————————————————————————————————	•	200				Y				"PUT" "DELETE" "PATCH" ※ Only operations that can be asynchronous can be
Status_code						Υ	N			created for each processing. $\frak{\%}$ Basically it assumes the json format, but for double quotes, it is assumed to be replaced by $\frak{\ } \frak{4} \frak{\%}$ and
body string N Y Response body data at rollback String information of response Body date at rollbacks object N Y Rollback information Optional for FC success: "completed", failure: "failed" none: "none" occurred time string Y N Rollback start time equest. Response information of rollback for clusters object. N Y Request. Response information of rollback for clusters object. N N Request information of rollback for clusters object. N N Request ID request object Y N Request URI POST			re				Υ	_		-
result string Y N Rollback information Optional for FC success." completed", failure: "failed" none: "none" occurred time string Y N Rollback start time - target_clusters object N N Y Reguest/Response information of rollback for clusters object N N N Cluster ID - cluster ID - request object N N Request Information of rollback for cluster ID - Request Information of rollback for cluster ID - Request Information - Request Information - Request ID - Reque				status_code	ınt	N		$\overline{}$	•	String information of access Delia 1
result string Y N Rollback information Optional for FC success: "completed", failure: "failed" none: "none" occurred time string Y N Rollback start time target_clusters object N Y Request/Response information of rollback for clusters cluster id string Y N Request ID - Request Information - Request URI request object Y N Request URI method string Y N Request method "POST" "PUT" DELETE" PATCH" Wonly operations that can be asynche specified or maracter string information or response created for each processing. Basically it assumes the jison format quotes, it is assumed to be replaced by stored. I response object N Y Response information - Response ode String information of response Redw.da				body	string	N	Υ		Response body data at rollback	
result string Y N Rollback process result success: "completed", failure: "failed" none: "none" occurred time string Y N Rollback start time target_clusters object[] N Y Request/Response information of rollback for clusters object [] N N Y Cluster ID request object Y N Request information uri string Y N Request URI method string Y N Request method "POST" "PUT" "DELETE" "PATCH" "X Only operations that can be asynched specified Uniaracter sung minormation of response created for each processing. "Request body part quotes, it is assumed to be replaced by stored. "I have been a success." "completed", failure: "failed" none: "none" None in case there is no target for rollb.			rollba	acks	object	N	Υ	$\overline{}$	Rollback information	0 11 15 50
Cocurred time							N			success: "completed", failure: "failed"
target_clusters object N Y Request/Response information of rollback for clusters object String Y N Cluster ID - Request information - Request URI - POST" "POST" "PATCH" "A Request method String Y N Request method "POST" "PATCH" "A Request method "POST" "PATCH" "A Request string N Y N Request body part string string minorination or response created for each processing. String string with the IF case where information is response object N Y Response information — String information or response object N Y Response code String information of response Reduction o			or	courred time	string	Υ	N	_	Rollback start time	-
Cluster_id String Y N Cluster ID								v		Nana in agas there is no toward for III
request object Y N Request information uri string Y N Request URI method string Y N Request method "POST" "POT" "ATOH" "ATOH" "Only operations that can be asynched specified Character sums minorimation or response object N Y Response information status code int N Y Response code String information of response Reduction of the specified string information of response Reduction is response code			ta			14		1	clusters	INORE IN CASE THERE IS NO TARGET FOR POliback
method string Y N Request URI "POST" "PUT" "DELETE" "PATCH" "Nonly operations that can be asynched specified Contracter suring information or response object N Y Response information Tesponse object N Y Response information Tesponse object N Y Response information Tesponse object N Y Response code String information of response Rody day String information of response Rody day The status code int N Y Response code String information of response Rody day The status code int N Y Response						Υ				-
method string Y N Request method "POST" "PUT" "DELETE" "PATCH" "Object N Y Response information Tesponse object N Y Response code Post						Y		_		-
method string Y N Request method "PUT" "DELETE" "PATCH" "Only operations that can be asynched specified Uniaracter suring minormation or response created for each processing. Request body part quotes, it is assumed to be replaced by stored. In the IF case where information is response object N Y Response information Response code String information of response Reduction				uri	string	Y	N	$\overline{}$	Request UKI	- "DOST"
body string N Y Request body part Created for each processing. **Basically it assumes the json format quotes, it is assumed to be replaced by stored. **In the IF case where information is response object N Y Response information — **Status code int N Y Response code **String information of response Rody day.				method	string	Υ	N		Request method	"PUT" "DELETE" "PATCH" ※ Only operations that can be asynchronous can be
status_code int N Y Response code				body	string	N	Y		Request body part	icreated for each processing. **Basically it assumes the json format, but for double quotes, it is assumed to be replaced by \$\[\] and
status_code int N Y Response code				response	object	N			Response information	
String information of response Body da							Υ			
				body	string	N	Υ		Response body data at rollback	String information of response Body data created
Refer to the "Error response format" sheet for error response	ļ.	D (-	ᄔ				-			every rollback to the cluster

interface	Getting controller state
method	GET

ğ					
-	tion parameter	type	required	overview	remarkss
	ntroller	string		target controller	"info" MFC "fo" FPC "eo" FPC "eo" FPC "en" EM Incase of multiple, concatenate with "+" ex) controller-fortectem If you don't specified, all controllers are subject to present the property of
clu	uster	string	N	target cluster	Incase of multiple, concatenate with "+" ex) cluster=1+2 If you don't specified, all controllers are subject to acquisition.
ge	t info	string	N	information to be acquired	Gorceau'. CPU utilization of operation system commentmemory used of operation system or dark it date usage of operation system or dark it was dealer of operation system currently. Tax Northal of operation system of the comment of the comment of the comment of the fair mem, memory usage of controller fair material controller status of threads of the controller status of threads of the controller status fair material controller status fair memory and the controller status threads of the controller status threads of the controller status and publication of the controller of the controller status of the controller status threads the controller status threads the controller status thread

										"ctr-send_req": number of transmit REST requests Incase of multiple, concatenate with "+" ex) get_info=os-cpu+os-mem*ctr-state
										If you don't specified, all controllers are subject to acquisition
URI		I/v1/	MSF	controller/status						
				controller/status	i.e.		Level		Ii	I
message request	-	body			tvoe -	required -	-	-	overview	remarkss -
		servi	ice_s	tatus	string	N	Υ		Service activation state of the controller as a whole. When the service start state of all controllers is activated, "start" is returned. Otherwise it returns.	"Running": activation "Warning": warning Required if "ctr-state" is specified in acquisition information, if acquisition information is omitted
		cont	roller	_service_statuses	object[]	N	Υ	N	Each controller and its service activation state	Required when the service activation state of the
				oller_type	string	Υ	N		Controller type	controller as a whole is warning "mfo": MFO "fo": FC "eo": EC "em": FM
		s	luste	r_id	string object	Y	N N	\geqslant	Cluster ID managed by the controller	Optional for MFC "start-up in progress": Preparing to start up
			se	rvice_status	string	Y	N		Service activation state	"running": sotivation "shutdown in progress": Preparing to stop "system switching": Switching system "unknown": Service start state unknown * 1 "If the controller status can not be acquired, the status under that controller status is returned as unknown service activation status
		block	kade.	status	string	N	Υ		Maintenance shutdown status of the entire controller. When all the controllers are in a maintenance shutdown state with no closure, "No blockage" is returned. If there is even one controller with blocking "closed" is returned.	"blockade": blocked "none": no obstruction Required if "ctr-state" is specified in acquisition information, if acquisition information is omitted
		cont	roller	_blockade_statuses	object[]	N	Υ	N	Each controller and its maintenance shutdown state	Required when the maintenance shutdown status of the controller as a whole is "blockade"
			ontr	oller_type	string	Υ	N		Controller type	"mfo": MFC "fo": FC "eo": EC
			luste	rjd	string	N	Y	=	Cluster ID managed by the controller	"em":EM Optional for MFC
				ockade_status	object	Y	N		Maintenance blocked state	"blockade": blocked "none": no obstruction
		audit	stat	us	string	Y	N		Data consistency state	# Required if controller type is not "m" Not applicable in this version "Consistency": consistency "Inconsistency": inconsistency "Executing." Matching.
		haal			string	_	N		Backup processing state	"Executing" Matching Not applicable in this version "Not running": Not executed
		Dack	up_s	atus	string	1	N		Backup processing state	"Running": Backing up Required if one of the following is specified in
		infor	matie	ons	object[]	N	Υ	×	OS or controller acquisition informatio	acquisition information "corcup" (SO EQU usage "cortian", OS memory usage "cortian", OS memory usage "cortian", OS memory "cortiant", Os memo
		ΙL		oller_type	string	Υ	N		Controller type	When specification of acquisition information is omitted "mfo": MFC "fo": "FC "ed": FC "ed": EC "em": EM
		h	cluster_id host_name		string	Y	N	=	Cluster ID managed by the controller Host name of the controller	Optional for MFC
		- n	nanaj	gement_ip_address	string	Y	N	$\overline{}$	Controller's management IP address	Required if one of the following is specified in
		a	ıs		object	N	Υ		Server machine resource information	acquisition information "os-ropu", OS CPU usage "os-mem". OS memory usage "os-tisk". OS disk usage "os-trafic". OS's NW communication traffic volume (receive/ transmit) When specification of acquisition information is omitted
response	200		сри		object	N	Υ		CPU utilization per unit time	Required if the following information is specified in acquisition information "os=opu": OS OPU usage When specification of acquisition information is omitted
			L	use_rate	float	Υ	N		CPU usage of the entire OS	unit:[8] If information can not be accuired -1 Required if the following information is specified in
			m	emory	object	N	Υ		Memory usage at a specific time	acquisition information "os-mem": OS memory usage When specification of acquisition information is omitted
				used	int	Υ	N	_	Amount of memory used	Unit: [KB]
				free	int	Υ	N	$\overline{}$	Amount of free memory	If information can not be acquired1 Unit: [KB]
				buff cache	int	Υ	N	$\overline{}$	Amount of memory allocated for	If information can not be accuired =1 Unit: [KB]
				swpd	int	v	N	$\overline{}$	Amount of virtual memory used	If information can not be acquired1 Unit: [KB]
			di			N N	ν			If information can not be acquired1 Required if the following information is specified in acquisition information
			ai	devices	object[]	N	T V	,	HDD usage at a specific time Device unit information	acquisition information "os-disk": OS disk usage When specification of acquisition information is omitted Optional if information could not be obtained
				file_system	string	Υ	N	/	Name of the device where the file system is located	-
				mounted_on size	string	Y	N N		Mount point Total usable capacity in file system	- Unit: [KB]
				used	int	Y	N N		Capacity used Usable capacity	Unit: [KB]
			tr	affic	object	N	Y		Traffic volume per unit time	Required if the following information is specified in acquisition information "os-trafic": OS s NW communication traffic volume (receive / transmit) When specification of acquisition information is omitted
				ifname	string	Y	N		Information per interface Interface name	Optional if information could not be obtained -
				rxpck txpck	float	Y	N N	$\overline{}$	Number of packets received per Number of packets sent per second	Unit: [packet / s] Unit: [packet / s]
				rxkb txkb	float float	Y Y	N N	=	Number of bytes received per second Number of bytes sent per second	Unit: [KB / s] Unit: [KB / s]
		a	sontr	oller	object	N	Υ		Information on controllers	Required if one of the following is specified in soquisition information "ctr-par"; CPU usage of controller 'ctr-men'; memory usage of controller 'ctr-receive, req." Number of REST requests received 'ctr-send req." Number of REST requests sent by the controller.
			ot	u	float	N	Υ		CPU utilization per unit time (CPU usage rate of controller process)	Required if the following information is specified in acquisition information "ctr-cpu": OPU usage of controller When specification of acquisition information is omitted unit.[8]
			m	emory	int	N	Υ		Memory usage at a specific time (memory usage of controller process)	Required if the following information is specified in soquisition information "ctr-mem": memory usage of controller "then specification of acquisition information is omitted Unit. [KB] If information can not be acquired -1 Required if the following information is specified in
			re	ceive_request	int	N	Υ		Received REST requests per unit time	acquisition information "ctr-receive_reg": Number of REST requests received by the controller When specification of acquisition information is omitted If information can not be acquired = 1.
				nd_request	int	N	Υ		Number of transmission REST request	Required if the following information is specified in acquisition information ctr-send/rag. Number of REST requests sent by the controller When specification of acquisition information is omitted If information can not be acquisited -1
1	(Refer	to the	e Er	ror response format"	sneet for error re	esponse				

Optional parameters	type	required	overview	remarkss
	суро		Overview	"Api,access": access log
log_type	string	-	Type of log to be acquired	"Processing': processing log When an access log is specified, logs can be acquired only from MFC logs in a multi- cluster configuration and FC from single cluster configurations. If not seeclifed, "processing" is tareved for acquisition.
log.level	string	-	Log level to be acquired	"Error": error "Marning": warning "Info": information To specify more than one, connect with "+" Example: log level = error + warning If not specified, "error" is targeted for acquisition.
controller	string	-	Controller to be acquired	It can be specified only when the log type is processing log. "mfo": MFC "fo": FC "eo": EC "em": EM To specify more than one, connect with "+" Example: controller = fo + eo + em If not specified, all controllers are targeted for acquisition.
cluster	string	-	Obtain target SW cluster	It can be specified only when the log type is processing log. Specify the ID of the SW cluster to be acquired To specify multiple clusters, connect with "#" Example: cluster = 1 + 2 If not specified, all clusters are to be acquired. Also, when MFC only is specified as the cootion parameter of "controller to be acquired," designation of this parameter is invalid.
start_date	string	-	Start date of log acquisition target period	It can be specified on a daily basis. Format is "YYYYMMDD" Example: start.date = 20171011 Obtain logs from the time 00: 00: 00:000 on the specified day If not specified, the start date will be the current day
end_date	string	-	End date of log acquisition target period	It can be specified on a daily basis. Format is "YYYYMMDD" Example: end_date = 20170101 Retrieve the logs up to the time 23: 59: 59:999 on the specified day
limit_number	int	-	Maximum number of acquired logs (number of lines) upper limit	If not specified, the and date is the current law one present of the another or accentance, responds from the most recent time of the acquisition target log to the specified number of logs. In the case of logs at the same time, the order of controllers (MFC — FC — EC — EM) is followed, and in the case of a multi-culster configuration, clurther in the ascending order of the cluster ID, from the beginning to the number specified. Specification example: limit_number = 100 Depending or the value of "log merging type", the acquisition upper limit number is defined as follows. Depending or the value of "log merging type", the acquisition upper limit number is defined as follows. As the controller of each cluster. When "merge" the log. Respond up to 100 logs per MFC log and each controller of each cluster. When "merge" the log. Respond up to 100 items in the merged log. If not specified, 1000 is the upper limit. In addition, when a value exceeding the maximum number of acquisitions that the MSF controller can respond is specified, the number of acquired logs is assumed to be the number of responsible upper limit of the MSF controller.
search_string	string	-	Search target character string	Specify a character string included in the log to be searched. This parameter must be URL-encoded in addition, it is assumed that multiple designation of the search target character string is prohibited, and uppercase and lowercase letters are distinguished. Regular expressions can not be used. Example: Original string "Controller start" Specification example: search string = Controller's 20start
merge_type	string	-	Log merging type	Specify whether to separate the logs of each controller (MFC / FC / EC / EW) separately and to respond or to merge them all in chronological order and respond as one log. "Separates" to separate "Merge": to merge

request	code	body		type	required	Allow null	Allow empty array	overview	remarkss
request		ı		-	-	-		-	-
		msf_		object		N		Log information to respond	-
		C	onditions	object		N		Acquisition condition information on logs to resp	
			log_type	string	Y	N		Response log type	Either "api access" or "processing" is included in the response value
			log_levels	string[]	Υ	N	N	Log level to respond	One or more of the following are stored in the response list. "Error", "warning", "info"
			controllers	string[]	Υ	N	N	List of controllers subject to acquisition	One or more of the following are stored in the response list. "Mfc". "fc". "ec". "em"
			clusters	string[]	Υ	N	Υ	List of IDs of clusters to be acquired	When the acquisition target controller is MFC only, it responds with an empty array
			start_date	string	Υ	Υ		Start date of specified log acquisition target per	Format is "YYYYMMDD" If no condition is specified, a null value is stored.
			end_date	string	Υ	Υ	$\overline{}$	End date of specified log acquisition target period	"Format is" YYYYMMDD " If no condition is specified, a null value is stored. "
			limit number	int	Y	Υ	$\overline{}$	Maximum number of acquisition log entries (num	When the condition is not specified, the upper limit value of the number of logs that the
							$\overline{}$		MSF controller can respond is set If no condition is specified, a null value is stored.
			search_string	string	Υ	Υ		Specified search target character string	If the specified character string contains characters that need to be escaped, it is escaped by the ¥ mark.
					v	N	$\overline{}$		
		H	merge_type	string	Y	N	$\overline{}$	Log merging type	The response value is either "separate" or "merge" Required when the log merge type is "merge". In the case of "separating", this parameter
			erged_log	object	N	Y		Merged controller log information	does not respond.
		-	erged_log	object	IN	1		werged controller log information	Log information that logs of all controllers matching the specified condition are merged in chronological order.
			data_number	int	Υ	N	$\overline{}$	Number of logs	corronological order. Store the number of acquired logs. It stores whether the number of logs to respond exceeds the specimed upper limit number.
							$\overline{}$		It stores whether the number of logs to respond exceeds the specified upper finit number. Example: If there are 1001 acquisition subjects when there are 1,000 acquisition limit
									number, the number of logs to be responded (data_number) is 1000 and over_limit_number
			over_limit_number	boolean	Υ	N		Whether the number of logs to be acquired exce	returns true.
								,	1000 cases When getting exactly, the number of responses is 1000, over_limit_number
									returns false.
			log_data	object[]	Υ	N	Υ	List of log information	If the number of acquired logs is 0, respond with an empty array.
			cluster_id	string		Υ		Cluster ID of the cluster in which the log occur	If the controller in which the log occurred is MFC, this parameter is not responded.
			contoller	string	Υ	N		The controller that generated the log	-
			server_name			N		The host name of the server where the log occi	=
response	200		occurred_time log_level			N N		time of occurrence Log level	-
response			thread id			N		Thread ID of log generation location	
			class_name			N		Class name of log output location	-
			method_name		Y	N		Method name of log output part	-
			line_number	int		N		Number of lines of log output location	-
		L	message	string	Υ	N		Log message	
				object[]	ļ.,	Υ	N	MFC log information	Required when the access log is specified as the log type, or when the log type is processing log and MFC is specified for the acquisition target controller and the log
		m	fc_logs	object[.	IN	Ť			merging type is "separate".
								N. I. CI	If it does not meet the above conditions, it will not respond.
l l			data_number	int	-	N	$\overline{}$	Number of logs	Store the number of acquired logs.
							_		Example: If there are 1001 acquisition subjects when there are 1,000 acquisition limit
			F 20 1	l	.,	N			number, the number of logs to be responded (data_number) is 1000 and over_limit_number
			over_limit_number	boolean	Υ	N		Whether the number of logs to be acquired exce	
									1000 cases When getting exactly, the number of responses is 1000, over_limit_number returns false.
l l					v	N	$\overline{}$	The best seen of the seen of t	
l l			server_name log_data	string object[N N	v	The host name of the server where the log occu List of log information	If the number of acquired logs is 0, respond with an empty array.
			occurred time			N	_	time of occurrence	- and manner or dequired rego to 0, respond with all ellipty alray.
			log_level			N		Log level	-
l l			thread_id			N		Thread ID of log generation location	-
l l			class_name			N		Class name of log output location	-
			method_name			N N		Method name of log output part Number of lines of log output location	-
l l			line_number message	int		N N		Number of lines of log output location Log message	
		c	uster_logs	object[]		Y	N N	List of in-cluster log information	Required when log merging type is "separate". It does not respond when merge type
		ľ	cluster_id	-		N N		Cluster ID of the log acquisition target cluster	"merge".
			fc_log	object	×	Y		FC log information	Required if FC is specified for the controller to be acquired.
			The same structure			a_number,	log_data) in "mfc_lo	g"	
l l			ec_log	object		Υ		EC log information	Required if EC is specified for the controller to be acquired.
			The same structure						
			The same structure	object		Y number			Required if EM is specified for the controller to be acquired.
}	Refer t	o the	"Error response format				io _{b_} uata/iii iiliC_l0	8	
		o une	Error rosponse format	STOCK TO	Circi Tesp	01100			

Interface name	Registering equipment information
Method	POST

URI /v1/equipment-types

essage cod	le body	type	required	Allow null	Allow empty array	overview	remarkss
	equipment_type	object	0	×		Model information	-
	equipment_type_id	string	×	0		equipment type ID	_
	platform	string	0	×		platform	_
	os	string	0	×		OS	_
	firmware	string	0	X		Firmware version	_
	router_type	string	0	X		router type	"normal", "core-router"
	physical_if_name_syntax	string	×	0		Physical-IF name syntax	When router_type is "core-router", required.
	breakout_if_name_syntax	string	×	0		Breakout-IF name syntax	<pre><pre></pre> <pre></pre> <</pre>
	breakout_if_name_suffix_list	string	×	0		breakout_if_name_suffix_list	Separated list format (ex) 0:1, 2:3) Only models that can use breakout-
	capability	object	0	×		Capability information	-
	vpn	object	0	×		VPN capability information	-
	12	boolean	0	×		L2VPN compatibility	-
	13	boolean	0	×		Possibility to comply with L3VPN	-
	qos	object	0	×		QoS capability information	-
	remarks	boolean	0	×		Remark function capability	-
	remarks_capability	string[]	×	0	0	Remark menu list	Specify a list of configurable remark menu.
	remarks_default	string	×	0		Default remark menu	Specify the default remark menu.
	shaping	boolean	0	×		Shaping function capability	-
	egress_queue_capability	string[]	×	0	0	Egress queue menu list	Specify a list of egress queue menu
quest -	egress_queue_default	string	×	0		Default egress queue menu	Specify the default egress queue m
	dhcp	object	0	×		DHCP information	-
	dhcp_template	string	0	×		File path of "dhcpd.conf"	-
	config_template	string	0	×		File path of initial config templete	_
	initial_config	string	0	×		File path of initial config	_
	snmp	object	0	×		SNMP information	_
	if_name_oid	string	0	×		MIB information of IF name	Set OID
	snmptrap_if_name_oid	string	×	0		MIB information of IF name in the SNMP	Set OID
	max_repetitions	int	0	×		Maximum number to get with GET Bulk	_
	boot_complete_msg	string	0	×		Syslog message for confirming the startup	-
	boot_error_msgs	string[]	×	0	×	Syslog message for confirming the failure	"null"
	if_definitions	object	0	×		IF information definition	-
	ports	object[]	Ŏ	×	0	Port information	-
	speed	string	Ō	×		Port speed	-
	port prefix	string	Ö	×		Port name prefix	-
	lag_prefix	string	Ö	×		Lag IF name prefix	-
	unit_connector	string	0	×		Unit IF connector	_
	slots	object[]	Ö	×	0	Slot information	-
	if_id	string	Ō	×		Physical port ID	-
	if_slot	string	Ö	×		IF slot name	-
	speed_capabilities	string[]	0	×	0	Port speed type correspondence list	-
201		string	Ō	×		Model ID	-

Body uses JSON format. The content to be set on the body should be specified appropriately in accordance with the format of each model

Interface name	Getting equipment list in switch cluster
Method	GET

option parameter	type	required	overview	remarkss
format	string	-		"list": list "detail-list": Detailed list When omitted, same as "list"

noc	
LIDI	/v1/equipment-types
URI	/v1/equipment-types?format=list

message	code	body	type	required	Allow null	Allow empty array	overview	remarkss
request	-	-	-	_	-	-	_	_
roononoo	200	equipment_type_ids	string[]	0	X	0	list of equipment type ID	-
response	Refer to the	"Error response format" sheet for error respo	nse		•			

Body uses JSON format.

detailed-list

URI		v1/equipment-types?format=detail-list										
-												
message	code	body	type	required	Allow null	Allow empty array	overview	remarkss				
request	-	_	-	-	_	-		-				
	200	equipment_types	object[]	0	×	0	list of equipment types	-				
response		Same as the information stored in the "ed	uipment_type" o	f "010103	; Getting e	equipment informati	on" sheet.					
	Refer to the	"Error response format" sheet for error respo	nse									

Interface name	Getting equipment information
Method	GET

URI parameter	type	overview	remarkss
equipment_type_id	string	equipment type ID	_

URI /v1/equipment-types/{equipment_type_id}

essage	code	body			type	required	Allow null	Allow empty array	overview	remarkss
equest	equipment_type		-	-	-	-	-	-		
					object	0	×		Model information	_
		eq	uipmen	t_type_id	string	0	×		equipment type ID	_
		pla	tform		string	0	×		platform	_
		os			string	0	X		os	_
		fir	nware		string	0	×		Firmware version	_
		ro	uter_typ	oe .	string	0	×		router type	"normal", "core-router"
		ph	physical_if_name_syntax			×	0		Physical-IF name syntax	When router_type is "core
			,		string					router", required. ex)" <portprefix>- <ifsoltname>:<break< td=""></break<></ifsoltname></portprefix>
		br	breakout_if_name_syntax breakout_if_name_suffix_list			×	0		Breakout-IF name syntax	TIFSUFFIX>" Only models that can use breakout-IF
		br				×	0		breakout_if_name_suffix_list	Separated list format (ex) 0:1, 2:3) Only models that can use breakout-IF
		ca	pability		object	0	×		Capability information	_
			vpn		object	Ö	×		VPN capability information	_
				12	boolean	ŏ	×		L2VPN compatibility	_
				13	boolean	Ö	×		Possibility to comply with L3VPN	_
			qos	10	object	ŏ	×		QoS capability information	_
			400	remarks	boolean	ŏ	×		Remark function capability	_
				remarks_capability	string[]	×	0	0	Remark menu list	Specify a list of configuratemark menu.
				remarks_default	string	×	0		Default remark menu	Specify the default remai menu.
	200			shaping	boolean	0	×		Shaping function capability	_
ponse	200			egress_queue_capability	string[]	×	0	0	Egress queue menu list	Specify a list of egress queue menu.
				egress_queue_default	string	×	0		Default egress queue menu	Specify the default egres queue meny.
		dh			object	0	×		DHCP information	_
				p_template	string	0	X		File path of "dhcpd.conf"	-
				fig_template	string	0	X		File path of initial config templete	-
			initia	al_config	string	0	×		File path of initial config	-
		sn	mp		object	0	×		SNMP information	_
			if_na	me_oid	string	0	X		MIB information of IF name	Set OID
			snm	ptrap_if_name_oid	string	×	0		MIB information of IF name in the SNMP	Set OID
			max	_repetitions	int	0	×		Maximum number to get with GET Bulk	-
		bo	ot_com	plete_msg	string	0	×		Syslog message for confirming the startur	-
		bo	ot_erro	r_msgs	string[]	×	0	×	Syslog message for confirming the failure	"null"
		if_	definitio	ons	object	0	×		IF information definition	-
	1	I I -	port	s	object[]	0	X	0	Port information	-
	1		I	speed	string	Ō	×		Port speed	-
				port_prefix	string	Ō	X		Port name prefix	-
			lag r	prefix	string	Ö	×		Lag IF name prefix	_
				connector	string	Ö	×		Unit IF connector	i_
		slo			object[]	Õ	×	0	Slot information	_
		SIC	if_id		string	ŏ	×		Physical port ID	_
			if slo			Ö	×		IF slot name	<u> </u>
					string	0	×	0		
				ed_capabilities sponse format" sheet for error resp	string[]	\cup	_^	U	Port speed type correspondence list	ı ⁻

Interface n Method	ame	Deleting equipment information DELETE								
URI parameter type overview remarks										
		equipment_type_id	string				equipment type ID	_		
URI		/v1/equipment-types/{equipment_ty	rpe_id}							
message	code	body	type	required	Allow null	Alllow empty array	overview	remarkss		
request	-	_	_	-	-	-	_	_		
response	204 Refer	to the "Error response format" shee	- for erro	- or response	-	_	-	-		

Interface name	Adding Switch-cluster
Method	POST

Option parameter	type	required	overview	remarks
notification_address	string	0	Destination address to notify completion of operation	Saa "Aaymahuanaya yagusat faymat" abaat
notification port	string	0	Destination port to notify completion of operation	See Asynchronous request format sheet

URI		/v1/clusters						
message	code	body	type	requir	Allow	Allow	overview	remarks
roguest		cluster	object	0	×	/	Switch cluster information	-
request	_	cluster_id	string	0	×		Cluster ID	=
rooponoo	202	operation_id	string	0	×	/	ID for acquiring information of asynchronous operation	-
response	Refer to the "	Error response format $^{\prime\prime}$ sh	neet for erro	r respo	nse			

Body uses JSON format.

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	requir	Allow	Allov	v overview I	remarks
	201	cluster_id	string	0	X	/	Cluster ID -	_
Refer to the "Error response format" sheet for error response								

	Getting list of Switch-cluster
Method	GET

Option parameter	type	required	overview	remarks
format	string	_	Acquired information type	"list": list "detail-list": Detailed list When omitted, same as "list"
user-type	string	-		"operator": System administrator When omitted, Slice user

URI	/v1/clusters
OKI	/v1/clusters?format=list

message	code	body	type	requir	Allow	Allow	overview	remarks
request	-	-	-	-	-	-	-	-
waananaa	200	cluster_ids	string[]	0	×	0	List of Cluster ID	-
response	Refer to the "I	Error response format" sheet fo						

Body uses JSON format.

URI /v1/clusters?format=detail-list											
message	code	body	type	requir	Allow	Allow	overview	remarks			
request	-	-	-	-	-	-	-	-			
response	200	clusters	object[]	0	×	0	List of Cluster ID	-			
	200	Same as information in "cluster" object in the "010203" sheet(for slice user)									
	Refer to the	Refer to the "Error response format" sheet for error response									

Body uses JSON format.

detailed list for administrator

URI		/v1/clusters?format=detail-list&user-type=operator						
message	code	body	type	requir Allow Allow overview	remarks			

message	code	body	type	requir	Allow	Allow	overview	remarks			
request	_	_	-		-	-	-	_			
	200	clusters	object[]	0			List of Cluster ID	_			
response		Same as information in "clu	ster" object i	n the	″01020	03″ sh	eet(for administrator)				
	Refer to the "E	to the "Error response format" sheet for error response									

	Getting information of Switch-cluster
Method	GET

URI parameter	type		overview	remarks
cluster_id	string		Cluster ID	-
-				
Option parameter	type	required	overview	remarks

detailed list for slice user
URI /v1/clusters/{cluster_id}

message	code	body	type	requir	Allow	Allow	overview	remarks
request	-	-	-	-	-	-	-	-
		cluster	object	0	×	/	Switch cluster information	_
		cluster_id		0	×	/	Cluster ID	_
		edge_points	object	0	×	/	List of edge-point ID	-
		I2_edge_points	string[]	0	×	0	List of L2 edge-point ID	-
		I3_edge_points	string[]	0	×	0	List of L3 edge-point ID	-
		uni_support_protocols		0	×	/	Supported UNI protocol information	-
		L2	boolean	0	×	/	L2 capability	-
rocponco	200	L3	boolean	0	×		L3 capability	-
response		L3_protocols	string[]	×	0	0	list of L3 protocol	_
			object	0	×	/		
		unused_speed_not_set_physical_ifs_num	int	0	×	/		
		creatable_edge_points_num	int	0	×	/		
		edge_points_with_no_cps_num	int	0	×	/		
		creatable_l2cps_num	int	0	×	/		
			int	0	×	/		
	Refer to	the "Error response format" sheet for error r	esponse					

Body uses JSON format.

detailed list for administrator

URI /v1/clusters/[cluster_id]?user-type=operator

message	code	body	type	requir	Allow	Allow	overview	remarks
request	-	-	-	-	-	-	-	-
		cluster	object	0	×		Switch cluster information	-
		cluster_id	string	0	×	/	Cluster ID	_
		max_leaf_num	int	0	×		Max Leaf node	_
		max_spine_num	int	0	×		Max Spine node	-
		ec_control_address	string	0	×		EC address	-
		ec_control_port	int	0	×		EC port	-
		as_number	int	0	×		AS number	-
		edge_points	object	0	×		List of edge-point ID	-
		I2_edge_points	string[]	0		0	List of L2 edge-point ID	-
		I3_edge_points	string[]	0		0	List of L3 edge-point ID	-
		uni_support_protocols	object	Ō	×		Supported UNI protocol information	-
		L2	boolean	0	×		L2 capability	-
		L3	boolean	0	×		L3 capability	-
	200	L3_protocols	string[]	×	_	0	list of L3 protocol	-
response	200	address_definitions	object	0	×		Address definitions for each cluster	-
		interface_start_address	string	0	×		Interface start IP address	-
		loopback_start_address	string	0	×	\sim	Roopback start IP address	-
		management_start_address	string	0	×		Management start IP address	-
		management_address_prefix	int	0	×		Management address prefix	-
		rrs	object	0	×		peer information	-
		peer_cluster	string	0	×			Cluster ID of RR connected by Leaf
		accommodated_clusters	string[]	0	_	0	Peer setting source cluster ID	Cluster ID of Leaf connect RR
		resources	object	0	×			
		unused_speed_not_set_physical_ifs_num		0	×			
		creatable_edge_points_num	int	0	×			
		edge_points_with_no_cps_num	int	0	×			
		creatable_l2cps_num	int	0	×			
		creatable_l3cps_num	int	0	×			
	Refer to	the "Error response format" sheet for error	response					

Interface name	Deleting Switch-cluster
Method	DELETE

URI parameter	type		overview	remarks
cluster_id	uster_id int		Cluster ID	<u></u>
Option parameter	type	required	overview	remarks
notification_address	string	0	Destination address to notify completion of operation	See "Asynchronous request format" sheet
notification_port	string	0	Destination port to notify completion of operation	See Asynchronous request format sheet

URI /v1/clusters/{cluster_id}

message	code	body	type	requir	Allow	Allow	overview	remarks
request	-	-	-	-	-	-	-	-
	202	operation_id	string	0	×		ID for acquiring information of asynchronous operation	_
response	Refer to the "I	Error response format" sh	eet for error	respo	nse			

Body uses JSON format.

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	requir	Allow	Allow	overview	remarks
roononoo	204	-	_	-	_	-	-	-
response	Refer to the "	${\sf Error}$ response ${\sf format}''$ sh	eet for error	respo	nse			

Interface name	Getting list of nodes
Method	GET

URI parameter	type		overview	remarkss
cluster_id	string		cluster ID	-
-				
option parameter	tpye	required	overivew	remarkss
format	string	-	Acquired information type	"list": list "detail-list": Detailed list When omitted, same as "list"
user-type	string	-	User type	"operator": System administrator

/v1/clusters/{cluster_id}/nodes /v1/clusters/{cluster_id}/nodes?format=list URI

message	code	body	type	required	Allow null	Allow empty array	overview	remarkss			
request	-	-	-	-	-	-	-	-			
		leaf_node_ids	string[]	0	×	0	List of node IDs of Leaf-node	-			
	200	spine_node_ids	string[]	0	×	0	List of node IDs of Spine-node	_			
response		rr_node_ids	string[]	0	×	0	List of node IDs of RR	_			
	Refer to the "Error response format" sheet for error response										

Body uses JSON format.

detailed list for slice user
URI /v1/clusters/(cluster_id)/nodes?format=detail-list

message	code	body	type	required	Allow null	Allow empty array	overview	remarkss		
request	-	_	-	-	-	-	-	-		
		leafs	object[]	0	X	0	List of node IDs of Leaf-node	-		
	Same as information in "leaf" object in the "010403" sheet									
	200		object[]	0	X	0	List of node IDs of Spine-node	-		
response	200	Same as information in "spine" o	bject in the "010	503" she	et					
			object[]	0	×	0	List of node IDs of RR	_		
		Same as information in "rr" object	t in the "010602	" sheet						
	Refer to the "Error response format" sheet for error response									

Body uses JSON format.

detailed list for administrator
URI |v1/clusters/|cluster_id|/nodes?format=detail-list&user-type=operator

message	code	body	type	required	Allow null	Allow empty array	overview	remarkss		
request	-	_	-	_	-	-	_	_		
		leafs	object[]	0	×		List of node IDs of Leaf-node	_		
		Same as information in "leaf" object in the "010403" sheet (for administrator)								
	200		object[]	0	×		List of node IDs of Spine-node	-		
response	200	Same as information in "spine" of	oject in the "010	503″ she	et (for adm	inistrator)				
			object[]	0	×	0	List of node IDs of RR	_		
		Same as information in "rr" object	t in the "010602	" sheet						
	Refer to the "Error response format" sheet for error response									

Interface name Adding Leaf- node
Method POST

URI paramter	type		overview		remarkss
cluster_id	string		cluster ID		-
option parameter	type	required		overview	remarkss
notification_address	string	0		Destination address to notify completion of operation	See "Asynchronous request format"
notification port	string	0		Destination port to notify completion of operation	sheet

URI /v1/clusters/[cluster_id]/nodes/leafs

essage		/v1/clusters/{cluster_id}/nodes/	lears					
	code	body	type		Allow null	Allow empty array	overview	remarkss
		node_id	string	00	X		Node ID	Specified by numeric character string
		equipment_type_id	string	0	×		Equipment type ID	"BL": IP-VPN Border-Leaf(B-Leaf)
		leaf_type	string	0	×		Leaf type	"IL": IP-VPN Leaf(L3Leaf) "EL": Ethernet VPN Leaf(L2Leaf)
		host_name	string	0	×		host name	=
		mac_address username	string string	0	×		MAC address login user name	format: "XX:XX:XX:XX:XX"
		password	string	ŏ	×		login passward	=
		provisioning	boolean	0	×		provisioning flag	true: configure by ZTP
		, ,		0	×		L2/L3 VPN type	false: already configured "12" or "13"
		vpn_type	string		^		LZ/ L3 VFN type	12 01 13
	1	plane	int	0	×		Plane	"1"
	1	snmp_community ntp_server_address	string string	0	×		SNMP community name NTP server address	+-
	1	breakout	object	×	ô		BreakoutIF information	-
	1	local	object	×	0		BreakoutIF information on adding Leaf	-
		breakout_ifs	object[]	0	×	×	-	Specify all breakouties gangerted by
		breakout_if_ids	string[]	0	×		breakoutIF ID	Specify all breakoutIFs generated by separating one physical IF
		base_if	object	0	×		Information on physical IF to be separated	
		physical_if_id	string	0	×		Physical IF ID to be separated	-
		division_number	int	0	×		Number to separate	_
		breakout_if_speed	string	0	×		IF speed after separation	=
		opposite	object[]	×	×	×	BreakoutIF information of oppsing Spine Opposite Spine-node ID	-
		opposite_node_id breakout_ifs	string object[]	ŏ	×	×	- Proposite Spirie-riode ID	-
		breakout_if_ids	string[]	0	×		breakoutIF ID	Specify all breakoutIFs generated by
		base if			×	/		separating one physical IF
		physical_if_id	object string	0	×	=	Information on physical IF to be separated Physical IF ID to be separated	-
quest		division_number	int	0	×		Number to separate IF speed after separation	=
quest		breakout_if_speed	string	0	^		IF speed after separation	Null if there is no internal link
		internal_links	object	0	0		Internal link information	don't specify more than one internal
		physical_links	-b:a[1	×	0	,	Physical link information	link where the Leaf-Spine pair is the
		opposite_node_id	object[] string	ô	×	<u></u>	Opposite Spine-node ID	When the internal links are physical
		local_traffic_threshold	double	×	0		Traffic threshold of the internal link IF of the Leaf	Gbps
		opposite_traffic_threshold	double	×	O ×	$\overline{}$	Traffic threshold of the internal link IF of the opposite Spine	Gbps
		internal_link_if local	object object	0	×		Internal link information of Leaf and opposite Spine Internal link information of Leaf	=
		physical_if	object	×	0		Physical IF information	Either physical IF or Breakout IF is
					×	$\overline{}$		required.
		physical_if_id physical_if_speed	string string	0	×		Physical IF ID Phsical IF speed	=
		breakout if	object	×	0		Breakout IF information	Either physical IF or Breakout IF is
					×	$\overline{}$	breakoutIF ID	required.
		breakout_if_id opposite	string object	00	×		Internal link information of opposite Spine	=
		physical_if		×	Ô		Physical IF information	Either physical IF or Breakout IF is
			object					required.
	1	physical_if_id physical_if_speed	string string	0	×		Physical IF ID Phsical IF speed	1
	1	breakout_if	object	×	0		Breakout IF information	Either physical IF or Breakout IF is
					×	$\overline{}$		required.
			string object[]	O ×	× O	×	breakoutIF ID LAG link information	When the internal links are LAG link
		opposite_node_id	string	0	×		Opposite Spine-node ID	=
		local_traffic_threshold	double	×	0		Traffic threshold of the internal link IF of the Leaf	Gbps
	1	opposite_traffic_threshold member_ifs	double object[]	o ×	×	×	Traffic threshold of the internal link IF of the opposite Spine Internal link information of Leaf and opposite Spine	Gbps When specify multiple menber links
		local	object	ŏ	×		Internal link information of Leaf	=
			1	×	0		Physical IF information	Either physical IF or Breakout IF is
		physical_if	object		×	$\overline{}$	Physical IF ID	required.
		1 1 1 1 1	object	0			I *	
		physical_if physical_if_id physical_if_speed	string	00	×		Phsical IF speed	=
		physical_if_id	string	0 0 ×		$/\!/$	Phsical IF speed Breakout IF information	Either physical IF or Breakout IF is
		physical_if_id physical_if_speed breakout_if	string string object	×	×	$\parallel \parallel \parallel$		Either physical IF or Breakout IF is required.
		physical_if_id physical_if_speed	string string		×	\mathbb{W}	Breakout IF information	required.
		physical_if_id physical_if_speed breakout_if breakout_if_id	string string object string	×	× O ×		Breakout IF information breakoutIF ID	required Either physical IF or Breakout IF is
		physical if id physical if speed breakout if breakout if id opposite physical if	string string object string object object	× O O ×	× O × ×		Breakout IF information breakoutIF ID Internal link information of opposite Spine Physical IF information	required.
		physical_if_id physical_if_speed breakout_if breakout_if_id opposite	string string object string object object string	× 0 0	× O × ×		Breakout IF information breakoutIF ID Internal link information of opposite Spine	required Either physical IF or Breakout IF is required
		physical if id physical if speed breakout if breakout if id opposite physical if physical if id	string string object string object object string	× 0 0 × 0	× O × × O ×		Breakout IF information breakout IF ID Internal link information of opposite Spine Physical IF information Physical IF ID	required. Either physical IF or Breakout IF is required. Either physical IF or Breakout IF is Either physical IF or Breakout IF is Either physical IF or Breakout IF is
		physical if id physical if speed breakout, if breakout, if opposite physical if id physical if id physical if id physical if speed breakout, if	string string object string object object string string object object	× 0 0 × 0 × 0 ×	× O × × × O		Breakout IF information breakoutIF ID Internal link information of opposite Spine Physical IF information Physical IF ID Phsical IF speed Breakout IF information	required Either physical IF or Breakout IF is required
		physical if id physical if speed breakout if preakout if breakout if preakout if id opposite physical if physical if speed physical if speed	string string object string object object string string	× 0 0 × 0 0	× O × × × ×		Breakout IF information breakoutIF ID Internal link information of opposite Spine Physical IF information Physical IF ID Phsical IF speed	required. Either physical IF or Breakout IF is required Either physical IF or Breakout IF is recuired Either physical IF or Breakout IF is required IP-4 address. Specify the manager IF address of the device. If omitted
		physical if id physical if speed breakout if breakout if id opposite physical if id	string string object string object object string string string string string string string	× 0 0 0 × 0 0 ×	× O × × × O × × × × O × × × × O × × × ×		Breakout IF information breakout IF ID Internal link information of opposite Spine Physical IF information Physical IF ID Phsical IF speed Breakout IF information breakout IF ID	required.

Body uses JSON format. Asynchronous response

message	code	body	type	required	Allow null	Allow empty array	overview	remarkss
response	201	node_id	string	0	×		Equipment type ID of adding Leaf	-
response	Refer	to the "Error response format" sheet for	error response					

	Getting list of Leaf-nodes
Method	GET

URI parameter	type		overview	remarks
cluster_id	string		cluster ID	- -
option parameter	type	required	overview	remarks
format	string	-	Acquired information type	"list": list "detail-list": Detailed list When omitted, same as "list"
user-type	string	-	User type	"operator": System administrator

Ī	LIDI	/v1/clusters/[cluster_id]/nodes/leafs
	UKI	/v1/clusters/{cluster_id}/nodes/leafs?format=list

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	-	-	-	-	-	-	_
roononoo	200	leaf_node_ids	string[]	0	X	0	List of node IDs of Leaf-node	-
response	Refer t	to the "Error response format" sheet	for error respon	nse				

Body uses JSON format.

detailed list for slice user

URI	/v1/clusters/[cluster_id]/nodes/leafs?format=detail-list								
message	code body	type	required	Allow nul	Allow empty	overview	remarks		
request		_	_	_	_	_	_		

Body uses JSON format.

detailed list for administrator

URI	/v1/clusters/{clust	er_id}/nodes/leafs?format=det	ail-list&user-type=operator	
message	code body	type	required Allow null Allow empty overview	remarks

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	-	-	_	-	_	-	-
		leafs	object[]	0	X	0	List of node IDs of Leaf-node	-
		Same as information in "leaf" ob	ject in the "0104	103" sheet	(for admir	nistrator)		

Interface name Getting information of Leaf-node Method GET

URI parameter	type		overview	remarks
cluster_id	string		cluster ID	-
node_id	string		node ID	-
option parameter	type	required	overview	remarks
user-type				
user-type	string	_	User type	"operator": System administrator When omitted. Slice user

IIDI /v1/alusters/faluster idl/nodes/leafs/fnode idl

nessage	code	body	/	type	required	Allow nu	Allow empty	overview	remarks
equest	-	-		-	-	-	-	-	-
		leaf		object	0	×		Node information	-
		n	ode_id	string	0	×		Node ID	-
		е	quipment_type_id	string	0	×		equipment type ID	-
			pn_type	string	0	×		L2/L3 VPN type	"I2" or "I3"
			lane	int	0	×		Plane	-
		р	h <u>ysical_ifs</u>	object[]	0	×	0	Physcial IF list	-
			physical_if_id	string	0	×		Physcial IF ID	-
		L	speed	string	×	0		IF speed	null if speed is not set.
		b	reakout_ifs	object[]	0	×	0	breakoutIF list	-
			breakout_if_id	string	Ō	×		breakoutIF ID	-
		L	speed	string	0	×		IF speed	-
		lε	ng_ifs	object[]	Q	×	0	Lag IF list	-
			lag_if_id	string	0	×	_	LagIF ID	-
			speed	string	Q	×	_	IF speed	-
			physical_if_ids	string[]	0	×	0	Physical IF ID list for LAG	-
esponse	200	L	breakout_if_ids	string[]	0	×	0	Breakout IF ID list for LAG	-
		p	rovisioning_status	string	0	×		Status of Leaf-node	"im-service" : active "before-setting": Waiting for startup "ztp-complete" / ZTP complete "node-resetting" complete ': Setting complet "failure-setting" citexpansion failed "failure-node-resetting"; Setting failed "failure-service-setting"; Service setting failed "failure-other"; out of service "failure-resover-mode"; out of service
									-
									-
									-
									-

ssage	code	body		type	required	equired Allow nul Allow empty overview			remarks	
quest	-	ı	•	-	-	-	_	-	-	
		leaf		object	Ŏ.	×	$\overline{}$	Leaf information	-	
		no	ode_id	string	0	×	$\overline{}$	Node ID	-	
		ec	quipment_type_id	string	U	^		equipment type ID	"BL": IP-VPN Border-Leaf(B-Leaf)	
		le	af_type	string	0			Leaf type	"II "- IP-VPN Border-Leaf(B-Leaf)	
			ui_typo	ouring	_			Loan typo	"IL": IP-VPN Leaf(L3Leaf) "EL": Ethernet VPN Leaf(L2Leaf)	
					0	×	\			
		_	ost_name	string			_ \	host name	_	
		m	ac_address	string	0	×		MAC address	-	
		us	sername	string	0	×	$\overline{}$	login user name		
		pr	rovisioning	boolean	0	×		provisioning flag	true: configure by ZTP false: already configured	
		VE	on_type	string	0	×	_	L2/L3 VPN type	"12" or "13"	
		pli	ane	int	0	×		Plane	-	
		sr	nmp_community	string	0	×	$\overline{}$	SNMP community name	-	
		nt	tp_server_address	string	0	x	\sim	NTP server address Physical IF ID list	-	
		pr	nysical_ifs physical_if_id	object[] string	0	Ŷ		Physical IF ID list Physical IF		
			internal_options	object	×	ô	$\overline{}$	Internal link information	-	
			ipv4_address	string	0	×	$\overline{}$	IPv4 address	-	
			opposite_if	object	Ō	×		Opposite IF	-	
									W	
			fabric_type node id	string string	0	x	$\overline{}$	equipment type Node ID	"spine": Spine	
			if_type	string	ŏ	×	$\overline{}$	IF type of opposite node	"physical-if". "breakout-if"	
	1		if_id	string	ŏ	x	/	IF ID of opposite node	= Drivoidal II . Dreakout-II	
	1			-						
	1									
	1						_			
							_			
							$\overline{}$			
							$\overline{}$			
			traffic_threshold	double	×	0		Traffic threshold	Gbps	
			speed	string	×	0		IF speed	null if speed is not set.	
							$\overline{}$			
			reakout ifs	object[]	0	×	0	Breakout IF ID list		
		01	breakout_if_id	string	ŏ	×		breakoutIF ID	-	
			internal_options	object	×	0	$\overline{}$	Internal link information	-	
			ipv4_address	string	0	×		IPv4 address	-	
			opposite_if	object	Q	×	$\overline{}$	Opposite IF	=	
			fabric_type	string	0	×	_	equipment type	"spine": Spine	
									орине . Орине	
			node_id	string	Ò	×	$\backslash\!\!\!/$	Node ID	-	
nonce	200		if_type	string	0	×	=	Node ID IF type of opposite node	"physical-if". "breakout-if"	
ponse	200		if_type if id		0 0 ×			Node ID	"physical-if". "breakout-if"	
ponse	200		if_type	string string	00	×		Node ID IF type of opposite node IF ID of opposite node Traffic threshold	-	
ponse	200		if_type if_id traffic_threshold speed	string string double	0 0 ×	x X O		Node ID IF type of opposite node IF ID of opposite node	"physical-if". "breakout-if"	
ponse	200	int	if_type if_id traffic_threshold speed	string string double string	0 0 × 0	× × O ×		Node ID IF type of opposite node IF ID of opposite node Traffic threshold IF speed	"physical-if". "breakout-if"	
ponse	200	int	if_type if_id traffic_threshold speed	string string double string	0 0 × 0	× × O ×	O 002" sheet	Node ID IF type of opposite node IF ID of opposite node Traffic threshold	"physical-if". "breakout-if"	
ponse	200		if type if id traffic,threshold speed ternal_link_ifs sme as information in g,ifs	string string double string	O O × O O object in	X X O X the "010!	O 902" sheet	Node ID If type of opposite node IF ID of opposite node Traffic threshold IF speed Internal link IF list LagIF ID list	"physical-if". "breakout-if"	
ponse	200		if type if id traffic,threshold speed ternal,link,ifs Same as information in gifs lag,if,id	string string double string object[] internal link, if object[] string	O X X O O O O O O O O O O O O O O O O O	× × O × the "010:	O 902" sheet	Node ID IF type of opposite node IF ID of opposite node Traffic threshold IF speed Internal link IF list LagIF ID list LagIF ID	"physical-if". "breakout-if"	
ponse	200		if type if id traffic,threshold speed ternal,link,ifs Same as information in g ifs lag_if_id internal_options	string string double string object[] "internal_link_if object[] string object	O N N N N N N N N N N N N N N N N N N N	x x O x the "010:	O O O O O O O O O O O O O O O O O O O	Node ID	"physical-if". "breakout-if"	
ponse	200		if type if id traffic,threshold speed ternal,link,ifs Same as information in gifs lag_if_id internal_options ipv4_address	string string double string object[] "internal_link.if object[] string object string	O X X O O O O O O O O O O O O O O O O O	x x O x the "010: x x X	O Sheet	Node IID IF type of opposite node IF ID of opposite node IF Taraffic threshold IF speed Internal link IF list LagIF ID list LagIF ID list Internal link information PV44 address	"physical-if". "breakout-if"	
ponse	200		if type if id traffic,threshold speed ternal,link,ifs Same as information in gifs lag_if_id internal_options ipv4_address	string string double string object[] "internal_link_if object[] string object string object	O O X O O O O O O O O O O O O O O O O O	x x O x the "010: x x x x x x x x x x x x x x x x	O Sheet	Node ID F type of opposite node F ID of opposite node F ID of opposite node Traffic threshold F speed If spee	- 'ohvsical-if', 'breakout-if' - Gbos	
oonse	200		if type if id traffic, threshold speed ternal link ifs ternal link ifs lag, if, id internal options pv4 address opposite; if fabric, type node, id	string string double string object[] "internal_link.if object[] string object string	O O X O O O O O O O O O O O O O O O O O	X	O	Node ID F type of opposite node F ID of opposite node F ID of opposite node Traffic threshold F speed F ID of opposite F ID of opposite F ID of opposite F ID opposite F I	"physical-if". "breakout-if"	
ponse	200		if type If id Traffic, threshold speed ternal link, ifs Same as information in g, ifs lag, if id internal options gv4 address opposite if fabric, type node, id lag, if, id	string string double string object[] internal_link_if object[] string object string object string object string string string string string	O O X O O O O O O O O O O O O O O O O O	x x O x x the "010: x x X X X X X X X X X X	0 002" sheet 0	Node ID F type of opposite node IF ID of opposite node IF ID of opposite node IF speed Internal link IF list Lagf ID list Lagf ID list Lagf ID Internal link information PV4 address Opposite IF sequipment type Node ID Node ID LAG IF ID	- ohvsical-if", "breakout-if" - Gbes	
ponse	200		if type If id traffic, threshold speed termal, link, ifs termal, link, ifs gets lag, if; id lag, if; id intermal, options jov4 address opposite if fabric, type node, jd lag, if; id traffic, threshold	string string double string object[] internal,link,if object[] string object string string string double double	O O O O O O X	x x O x x the "010: x x x X X X X X X X O O C X X X X X X X X X X	O 02" sheet	Node ID F type of opposite node F ID of opposite node F ID of opposite node Traffic threshold F speed F ID of opposite node Traffic threshold F speed F ID opposite node F ID F ID Traffic threshold F ID Traffic threshold F ID F ID	- 'ohvsical-if', 'breakout-if' - Gbos	
ponse	200		if, type if, id traffic, threshold speed ternal, link, ifs Same as information in g, ifs lag, if, id internal, options inv4 address opposite, if fabric, type node, id lag, if, id interfic, threshold traininum, links	string double string object[] "internal link.if object[string object string object string object string object string object string object int	O O X O O O O O O O O O O O O O O O O O	X	O sheet	Node ID	- ohvsical-if", "breakout-if" - Gbes	
ponse	200		if type If id traffic, threshold speed termal, link, ifs termal, link, ifs gets lag, if; id lag, if; id intermal, options jov4 address opposite if fabric, type node, jd lag, if; id traffic, threshold	string string double string object[] internal,link,if object[] string object string string string double double	O O O O O O X	x x O x x the "010: x x x X X X X X X X O O C X X X X X X X X X X	O sheet	Node ID F type of opposite node F ID of opposite node F ID of opposite node Traffic threshold F speed F ID of opposite node Traffic threshold F speed F ID opposite node F ID F ID Traffic threshold F ID Traffic threshold F ID F ID	- ohvsical-if", "breakout-if" - Gbes	
ponse	200		if, type if, id traffic, threshold speed ternal, link, ifs Same as information in g, ifs lag, if, id internal, options inv4 address opposite, if fabric, type node, id lag, if, id interfic, threshold traininum, links	string double string object[] "internal link.if object[string object string object string object string object string object string object int	O O O O O O X	X	0 002" sheet 0	Node ID	- ohvsical-if", "breakout-if" - Gbes	
ponse	200		If type If Id speed ternal link fs Same as information in Eff Ing If Id internal options pv4 address opposite if fabric type node id traffic threshold minimum links speed	string double string object[] "internal link.if object[string object string object string object string object string object string object int	O O O O O O X	X	002 sheet	Node ID Flype of poposite node	- ohvsical-if", "breakout-if" - Gbes	
ponse	200	la	if, type if, id traffic, threshold speed s	string string double string object[] object[] string object string object string object string object string	O O O O O O O O O O O O O O O O O O O	x x x O x x x x x x x x x x x x x x x x		Node ID F type of opposite node F ID opposit	- ohvsical-if", "breakout-if" - Gbes	
ponse	200	lai	if type If	string string double string object[] object[] string object string object string object string	O v v object in O v v o o o o o o o o o o o o o o o o o	x x x x x x x x x x x x x x x x x x x		Node ID Fi type of opposite node IF ID of opposite node IF ID of opposite node IF ID of opposite node Internal link IF list LagF ID Tolerand link information IPV4 address Opposite IF escipensit type scipensit type scipensit type scipensit IF Traffic threshold Number of milinum link IF speed Physical IF ID list for LAG Breakout IF ID list for LAG Breakout IF ID list for LAG Router ID	- ohvsical-if", "breakout-if" - Gbes	
ponse	200	lai	if, type if, id traffic, threshold speed s	string string double string object[] object[] string object string object string object string object string	O O O O O O O O O O O O O O O O O O O	x x x O x x x x x x x x x x x x x x x x		Node ID F type of opposite node F ID opposit	"physical-if", "breakout-if" Cbos	
ponse	200	lai	if type If	string string double string object[] object[] string object string object string object string	O v v object in O v v o o o o o o o o o o o o o o o o o	x x x x x x x x x x x x x x x x x x x		Node ID Fi type of opposite node IF ID of opposite node IF ID of opposite node IF ID of opposite node Internal link IF list LagF ID Tolerand link information IPV4 address Opposite IF escipensit type scipensit type scipensit type scipensit IF Traffic threshold Number of milinum link IF speed Physical IF ID list for LAG Breakout IF ID list for LAG Breakout IF ID list for LAG Router ID	"chvsical-if", "breakout-if" Gbos	
ponse	200	lai	if type If	string string double string object[] object[] string object string object string object string	O v v object in O v v o o o o o o o o o o o o o o o o o	x x x x x x x x x x x x x x x x x x x		Node ID Fi type of opposite node IF ID of opposite node IF ID of opposite node IF ID of opposite node Internal link IF list LagF ID Tolerand link information IPV4 address Opposite IF escipensit type scipensit type scipensit type scipensit IF Traffic threshold Number of milinum link IF speed Physical IF ID list for LAG Breakout IF ID list for LAG Breakout IF ID list for LAG Router ID	"chvsical-if", "breakout-if" Gbes	
ponse	200	lai	if type If	string string double string object[] object[] string object string object string object string	O v v object in O v v o o o o o o o o o o o o o o o o o	x x x x x x x x x x x x x x x x x x x		Node ID Fi type of opposite node IF ID of opposite node IF ID of opposite node IF ID of opposite node Internal link IF list LagF ID Tolerand link information IPV4 address Opposite IF escipensit type scipensit type scipensit type scipensit IF Traffic threshold Number of milinum link IF speed Physical IF ID list for LAG Breakout IF ID list for LAG Breakout IF ID list for LAG Router ID	"chvsical-if", "breakout-if" Gbes	
ponse	200	lai ro	if, type if id traffic, threshold speed sp	string string double string double string object[] "internal link if object[] string object string object string string double int string	O O O O O O O O O O O O O O O O O O O	X		Node ID	"chvsical-if", "breakout-if" Gbes	
ponse	200	lai ro	if type If	string string double string object[] object[] string object string object string object string	O v v object in O v v o o o o o o o o o o o o o o o o o	x x x x x x x x x x x x x x x x x x x		Node ID Fi type of opposite node IF ID of opposite node IF ID of opposite node IF ID of opposite node Internal link IF list LagF ID Tolerand link information IPV4 address Opposite IF escipensit type scipensit type scipensit type scipensit IF Traffic threshold Number of milinum link IF speed Physical IF ID list for LAG Breakout IF ID list for LAG Breakout IF ID list for LAG Router ID	"chvsical-if", "breakout-if" Gbes	
ponse	200	lai ro	if, type if id traffic, threshold speed sp	string string double string double string object[] "internal link if object[] string object string object string string double int string	O O O O O O O O O O O O O O O O O O O	X		Node ID	"chvsical-if", "breakout-if" Gbes Gbes "spine": Spine "spine": Spine "in-service": active "before-acting": Waiting for startup ztyr-complete "ZIP" complete ztyr-complete "ZIP" complete starting of spine "fallura-services "Setting food "fallura-encor-creekting": Setting fallod "fallura-encor-creekting": Setting fallod "fallura-encor-creekting": Setvice setting "fallura-encor-creekting": Setvice setting	
ponse	200	lai ro	if, type if id traffic, threshold speed sp	string string double string double string object[] "internal link if object[] string object string object string string double int string	O O O O O O O O O O O O O O O O O O O	X		Node ID	- chvsical-if", "breakout-if" Gbes - Gbes	
ponse	200	lai ro	if, type if id traffic, threshold speed sp	string string double string double string object[] "internal link if object[] string object string object string string double int string	O O O O O O O O O O O O O O O O O O O	X		Node ID	"chvsical-if", "breakout-if" Gbos	
conse	200	ro m	if, type if id traffic, threshold speed sp	string string double string double string object[] "internal link if object[] string object string object string string double int string	O O O O O O O O O O O O O O O O O O O	X		Node ID	- chvsical-if", "breakout-if" Gbes - Gbes	
conse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	
ponse	200	ro m	if type if if ype if ype	string string string double string object[] "mernal link if string object string object string object string	O O O O O O O O O O O O O O O O O O O	X		Node ID Ftype of opposite node Fi Do opposite no	"chvsical-if", "breakout-if" Gbos	

Interface name	Deleting Leaf-node
Method	DELETE

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
node id	string	Node ID	=

option parameter	type	required	overview	remarks
notification_address	string	0	Destination address to notify completion of operation	See "Asynchronous request format"
notification_port	string	0	Destination port to notify completion of operation	sheet

URI /v1/clusters/{cluster_id}/nodes/leafs/{node_id}

message	code	body	type	required	Allow nul	Allow empty	overview	remarks		
request	-	_	-	_	-	-	-	_		
	202	operation_id	string	0	×		ID for acquiring information of asynchronous operation	_		
response	Refer to the "Error response format" sheet for error response									

Body uses JSON format.

Asynchronous response

message	code	body		type	required	Allow nul	Allow empty	overview	remarks
roononoo	204	-		-	-	-	_	-	-
response	Refer to the "Error response format" sheet for error response								

Interface name	Updating Leaf-node
Method	PUT

URI parameter type	overview	remarks
cluster_id string	cluster ID	-
node_id string	Node ID	-

option parameter	type	required	overview	remarks
notification_address	string	O	Destination address to notify completion of operation	Saa "Asynahranaya ragyaat format" ahaat
notification_port	string	0	Destination port to notify completion of operation	See Asynchronous request format sheet

URI /v1/clusters/{cluster_id}/nodes/leafs/{node_id}

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
		action	string	0	×		control type	"chg_leaf_type": Change the type of Leaf "recover_node": Service recovery
		leaf_type_option	object	×	×		Option for changing leaf type	When control type is "chg_leaf_type"
		leaf_type	string	0	×		Leaf type	"BL": IP-VPN Border-Leaf(B-Leaf) "IL": IP-VPN Leaf(L3Leaf) "EL": Ethernet VPN Leaf(L2Leaf)
request	_	recover_node_option	object	×	×		Option for Service recovery	When control type is "recover_node"
request		equipment_type_id	string	0	×		equipment type ID	
		mac_address	string	0	×		MAC address	format: "XX:XX:XX:XX:XX"
		username	string	0	×		Login user name	-
		password	string	0	×		Login password	-
response		operation_id	string	0	×		ID for acquiring information of asynchronous operation	=
. 550 51150	Refer	to the "Error response format" sheet for	error response					

Body uses JSON format.

Asynchronous response

message	code	body	type	requi	overview	remarks
response	200	_	-	-	-	-
response	Refer t	to the "Error res	ponse format" shee	t for e	rror response	

Interface name	Adding Spine-node
Method	POST

URI parameter	type	overview		remarks
cluster_id	string	cluster ID		-
option parameter	type	required	overview	remarks
notification_address	string	0	Destination address to notify completion of operation	See "Asynchronous request format"
notification_port	string	0	Destination port to notify completion of operation	sheet

URI /v1/clusters/(cluster_id)/nodes/spines

	code	body		type	required	Allow nu	Allow empty	overview	remarks
ssage		node_id		string	O	X	thow empty	Node ID	Specified by numeric character strin
		equipmen	it type id	string	Ö	×		Equipment type ID	-
		host_nam		string	ŏ	×		host name	_
		mac_addr		string	Ö	×		MAC address	format: "XX:XX:XX:XX:XX"
		username		string	Ŏ	×		login user name	-
		password		string	Ö	×		login passward	-
									true: configure by ZTP
		provision	ing	boolean	0	×		provisioning flag	false: already configured
		snmp_cor	nmunity	string	0	×		SNMP community name	-
			r_address	string	Ö	×		NTP server address	İ-
		breakout		object	×	0		BreakoutIF information	-
		local		object	×	0		BreakoutIF information on adding Spine	=
			akout_ifs	object[]	0	×	×	-	=
			breakout_if_ids	-Auto-of 1	0	×		breakoutIF ID	Specify all breakoutIFs generated by
			breakout_ii_ids	string[]	O	^		breakoutir ID	separating one physical IF
			base_if	object	0	×		Information on physical IF to be separated	
			physical_if_id	string	0	×		Physical IF ID to be separated	-
			division_number	int	0	×		Number to separate	
			breakout_if_speed	string	0	×		IF speed after separation	-
		oppos	ite	object[]	×	0	×	BreakoutIF information of oppsing Leaf	-
		opp	oosite_node_id	string	0	×		Opposite Leaf-node ID	-
			akout_ifs	object[]	0	×	×	-	-
				T I	0	×		hreakeutIE ID	Specify all breakoutIFs generated b
			breakout_if_ids	string[]				breakoutIF ID	separating one physical IF
			ba <u>se_if</u>	object	0	×		Information on physical IF to be separated	
			physical_if_id	string	0	X		Physical IF ID to be separated	
			division_number	int	0	×		Number to separate	-
			breakout_if_speed	string	Ō	×		IF speed after separation	-
		internal_li	nks	object	0	0		Internal link information	Null if there is no internal link don't specify more than one interna
		- T	at Bata	-L: -F1	_		_	Dhi I link information	link where the Leaf-Spine pair is th
			al_links	object[]	×	0	×	Physical link information	When the internal links are physica
		opp	posite_node_id	string	0	×		Opposite Leaf-node ID	-
			al_traffic_threshold	double	×	0		Traffic threshold of the internal link IF of the Spine	Gbps
			posite_traffic_threshold	double	×	0		Traffic threshold of the internal link IF of the opposite Lea	Gbps
			ernal_link_if	object	0	×		Internal link information of Spine and opposite Leaf	-
			local	object	0	×		Internal link information of Spine	-
est	-		physical_if	object	×	O ×		Physical IF information	Either physical IF or Breakout IF is required.
			physical_if_id	string	0			Physical IF ID	-
			physical_if_speed	string	0	×		Phsical IF speed	-
			breakout_if	object	×	0		Breakout IF information	Either physical IF or Breakout IF is required.
			breakout_if_id	string	0	×	$\overline{}$	breakoutIF ID	required.
			opposite	object	0	×	$\overline{}$	Internal link information of opposite Leaf	
			opposite	object			$\overline{}$	Internal link information of opposite Leaf	Either physical IF or Breakout IF is
			physical_if	object	×	0		Physical IF information	required.
			physical_if_id	string	0	×	_	Physical IF ID	required.
					0	×		Phsical IF speed	
			physical_if_speed	string	U	^		Prisical IF speed	
			breakout_if	object	×	0		Breakout IF information	Either physical IF or Breakout IF is
					$\overline{}$	×	$\overline{}$	breakentIE ID	required.
		lea li-	breakout_if_id	string	O ×	Ŏ	×	breakoutIF ID LAG link information	When the internal links are LAG lin
		lag_linl		object[]		×	_	Opposite Leaf-node ID	when the internal links are LAG lin
			oosite_node_id al_traffic_threshold	string double	×	ô		Traffic threshold of the internal link IF of the Spine	Gbps
			ai_traffic_threshold	double	×	0		Traffic threshold of the internal link IF of the Spine Traffic threshold of the internal link IF of the opposite Lea	Gbps
			mber_ifs	object[]	ô	×	×	Internal link information of Spine and opposite Leaf	When specify multiple menber links
			local	object	0	×		Internal link information of Spine and opposite Lear	-
				T I				,	Either physical IF or Breakout IF is
			physical_if	object	×	0		Physical IF information	required.
			physical_if_id	string	0	×	$\overline{}$	Physical IF ID	-
			physical_if_speed	string	0	×		Physical IF ID	-
									Either physical IF or Breakout IF is
			breakout_if	object	×	0		Breakout IF information	required.
			breakout_if_id	string	0	×		breakoutIF ID	
			opposite	object	Ö	×		Internal link information of opposite Leaf	-
									Either physical IF or Breakout IF is
			physical_if	object	×	0		Physical IF information	required.
			physical_if_id	string	0	×		Physical IF ID	-
			physical_if_speed	string	Ö	×		Phsical IF speed	-
									Either physical IF or Breakout IF is
			breakout_if	object	×	0		Breakout IF information	required.
			breakout_if_id	string	0	×	_ `	breakoutIF ID	-
		managem	ent_if_address	string	×	0		Management IF address	IPv4 address. Specify the manager IF address of the device. If omitted
									contorller automatically pays out. 0 to 32
		managem	ent_if_prefix	int	×	O ×		Management IF prefix ID for acquiring information of asynchronous operation	Required if management IF address specified

Body uses JSON format. Asynchronous response

message	e c	code	body	type	required	Allow nul	Allow empty	overview	remarks
recnonce	2	201	node_id	string	0	×		Equipment type ID of adding Spine	-
response Refer to the "Error response format" sheet for error response									

Interface name	Getting list of Spine-nodes
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-

option parameter	type	required	overview	remarks
format	string	-	Acquired information type	"list": list "detail-list": Detailed list When omitted, same as "list"
user-type	string	0		"operator": System administrator When omitted, Slice user

URI	/v1/clusters/[cluster_id]/nodes/spines?user-type=operator
URI	/v1/clusters/{cluster_id}/nodes/spines?format=list&user-type=operator

message	code	body	type	required	Allow nul	Allow	overview	remarks			
request	-	-	_	-	-	-	-	-			
roononoo	200	spine_node_ids	string[]	0	×	0	List of node IDs of Spine-node	-			
response	Refer t	Refer to the "Error response format" sheet for error response									

Body uses JSON format.

detailed list for administrator

actanea not for aun	illi il strator
URI	/v1/clusters/[cluster_id]/nodes/spines?format=detail-list&user-type=operator

message	code	body	type	required	Allow nul	Allow	overview	remarks	
request	-	-	-	_	-	_	-	-	
	200	spines	object[]	0	×		List of node IDs of Spine-node	_	
response	200	Same as information in "spine" object in the "010503" sheet (for administrator)							

Interface name	Getting information of Spine-node
Method	GET

URI parameter	type		overview	remarks
cluster_id	string		cluster ID	-
node_id	string		node ID	-
option parameter	type	required	overview	remarks
user-tyne	etring	10	Hear type	"aparator": System administrator

【システム管理者向け詳細情報】 URI /v1/clusters/[cluster_id]/nodes/spines/[node_id]?user-type=operator

sage a	code	hody			tyne	required	Allow pu	Allow empty	overview	remarks
est -	_ coue	–			type -	_ equired	–	I_	- Ioverview	remarks
est		spine			object	0	×		Node information	_
		node	id		string	Ö	×		Node ID	_
				type_id	string	Ŏ	×		equipment type ID	-
			name		string	Ö	×		host name	-
			addres	s	string	0	×		MAC address	-
		user	name		string	0	×		login user name	-
		provi	sioning		boolean	0	×		provisioning flag	true: configure by ZTP false: already configured
		snmp	_comn	nunity	string	0	×		SNMP community name	-
		ntp_s	erver_a	address	string	0	×		NTP server address	-
			ical_ifs		object[]	0	×	0	Physical IF ID list	-
		1	physical_if_id		string	0	×		Physical IF	-
		l li		_options	object	×	0		Internal link information	-
				address	string	0	×		IPv4 address	
			opp	osite_if	object	0	×		Opposite IF	_
				fabric_type	string	0	×		equipment type	"leaf":Leaf
				node_id	string	0	×		Node ID	-
				if_type	string	0	×		IF type of opposite node	"physical-if", "breakout-if"
				if_id	string	0	×		IF ID of opposite node	-
								$\overline{}$		
				e					T 65 11 1 11	
		l H		fic_threshold	double	X	0		Traffic threshold	Gbps
			peed		string	×	O ×	0	IF speed	null if speed is not set.
			κουt_ifs reakοι		object[] string	0	×	_	Breakout IF ID list breakoutIF ID	
				_options	object	×	ô		Internal link information	
				address	string	ô	×		IPv4 address	
				osite_if	object	Ö	×	$\overline{}$	Opposite IF	_
			Орр	fabric_type	string	Ö	×	$\overline{}$	equipment type	"leaf": Leaf
nse 2	200			node_id	string	Ö	×	$\overline{}$	Node ID	-
150				if_type	string	ŏ	×		IF type of opposite node	"physical-if", "breakout-if"
				if_id	string	ŏ	×		IF ID of opposite node	- physical II , breakout II
			traf	fic_threshold	double	×	0		Traffic threshold	Gbps
		-	speed		string	0	×		IF speed	_
			nternal_link_ifs		object[]	Ö	×	0	Internal link IF list	_
			Same as information in "internal_link_i						•	
		lag_if	ng_ifs		object[]	0	×	0	LagIF ID list	-
			ag_if_id		string	0	×		LagIF ID	-
				_options	object	×	0		Internal link information	-
				address	string	0	×		IPv4 address	-
			opp	osite_if	object	0	×		Opposite IF	-
				fabric_type	string	0	×		equipment type	"leaf": Leaf
				node_id	string	0	×		Node ID	-
				lag_if_id	string	0	×		LAG IF ID	-
		L		fic_threshold	double	×	0		Traffic threshold	Gbps
				m_links	int	0	×		Number of milinum link	-
			peed		string	0	×		IF speed	-
			hysica		string[]	0	×	0	Physical IF ID list for LAG	-
				ıt_if_ids	string[]	O O	×	0	Breakout IF ID list for LAG	-
		route		4 16 - 4 do	string	0	×		Router ID	- -
		mana	igemer	t_if_address	string	0	×	\leftarrow	Management IF address	
		provi	provisioning_status		string	0	×		Status of Leaf-node	"in-service": active "before-setting": Waiting for startup "ztp-complete".ZTP complete "node-resetting-complete": Setting complete "failure-setting": Expansion failed "failure-node-resetting": Setting failed "failure-service-setting": Service setting failed "failure-other": out of service "failure-cover-node": out of service (Service Rectfailure)
										italiul 6/
		Г						$\overline{}$		
		-								
				ponse format" sheet fo						

Interface name	Deletting Spine-node
Method	DELETE

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
node_id	string	Node ID	-

option parameter	type	required	overview	remarks
notification_address	string	0	Destination address to notify completion of	See "Asynchronous request format"
notification_port	string	0	Destination port to notify completion of op-	sheet

URI /v1/clusters/{cluster_id}/nodes/spines/{node_id}

message	code	body	type	required	Allow null	Allow empty	overview	remarks
request	_	-	_	-	_	-	-	-
waananaa	202	operation_id	string	0	×		ID for acquiring information of asynchronou	
response	Refer t	o the "Error response format" sheet	for erro	r response				

Body uses JSON format.

Asynchronous response

message	code	body t	уре	required	Allow null	Allow empty	overview	remarks
	204	-	-	-	-	_	-	-
response Refer to the "Error response format" sheet for error response								

	Getting list of RR-node
Method	GET

URI parameter	type		overview	remarks
cluster_id	string		cluster ID	_
option parameter	type	required	overview	remarks
		Acquired information type	"list": list "detail-list": Detailed list When omitted, same as "list"	
option parameter	type	required	overview	remarks
user-type	string	0	user type	"operator": administrator

I	LIDI	/v1/clusters/{cluster_id}/nodes/rrs?user-type=operator
ı	UKI	/v1/clusters/[cluster_id]/nodes/rrs?format=list&user-type=operator

message	code	body	type	requir	Allow	Allow	overview	remarks
request	-	-	-	-	-	-	-	-
roonanaa	200	rr_node_ids	string[]	0	X	0	List of node IDs of RR	-
response	Refer	to the "Error response format" she	et for error resp	onse				_

Body uses JSON format.

detailed lis	t								
URI	/v1/clusters/{cluster id}/nodes/rrs?format=detail-list&user-type=operator								
-									
message	code	body	type	requir	Allow	Allow	overview	remarks	
request	-	-	-	-	-	-	-	-	
	200	rrs	object[]	0	×	0	information of RR-node	-	
response	200	Same as information in "rr" object in the "010602" sheet							
	Refer	to the "Error response format" she	et for error resp	onse					

Interface name	Getting infromation of RR-node
Method	GET

URI parameter	type		overview	remarks
cluster_id	string		cluster ID	-
node_id	string		Node ID	-
option parameter	type	required	overview	remarks
user-type	string	10	user type	"operator": administrator

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	-	-	-	-	-	-	-
		rr	object	0	×		RR information	-
		node_id	string	0	×		Node ID	_
						$\overline{}$		
						$\overline{}$		
	200					$\overline{}$		
response		router id	string	0	×		Router ID	_
		router_id	String		^		Router ID	
						\parallel		
	Refer t	to the "Error response format" sheet for erro	or response				·	

Interface name	Gettinig list of interfaces
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
fabric_type	string	Device type	"spines": Spine "leafs": Leaf
node_id	string	Node ID	

option parameter	type	required	overview	remarks
format	string	-	Acquired information type	"list": list "detail-list": Detailed list When omitted, same as "list"

	URI	/v1/clusters/{cluster_idJ/nodes/{fabric_type}/{node_idJ/interfaces
_		/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces?format=list

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	-	-	-	-	-	-	-
		physical_if_ids	string[]	0	×	0	Physical IF ID list	-
	200	breakoutl_if_ids	string[]	0	×	0	Breakout IF ID list	_
response	200	internal_link_if_ids	string[]	0	×	0	Internal link IF ID list	-
		lag_if_ids	string[]	0	×	0	LAG IF ID list	_
Refer to the "Error response format" sheet for error response								

Body uses JSON format.

detailed list URI

/v1/clusters/{c	cluster_id}/no	odes/{fabric_type	l/interfaces?format=detail-list

message	code	body	type	required	Allow nul	Allow empty	overview	remarks		
request	-	-	-	-	-	-	-	-		
			object[]	0	×	0	Physical IF ID list	_		
		Same as information in "physical	_if" object in the	"010802"	sheet					
			object[]	0	×	0	Breakout IF ID list	_		
	200	Same as information in "breakou	t_if" object in th	e "010903	" sheet					
response	200		object[]	0	×		Internal link IF ID list	_		
		Same as information in "internal_link_if" object in the "010902" sheet								
			object[]	0	×	0	LAG IF ID list	-		
			Same as information in "lag_if" object in the "011003" sheet							
	Refer to the "Error response format" sheet for error response									

Interface name	Getting list of physical interfaces
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-
fabric_type	string	Device type	"spines" : Spine "leafs" : Leaf
node id	string	Device ID	=

option parameter	type	required	overview	remarks
format	string	-	Get information type	"detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list"

ı	IDI	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-ifs
	JRI	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-ifs?format=list

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	_	-	_	_	-	_	-
response	200	physical_if_ids	string[]	0	×	0	Physical IF ID list information	_
response	Refer t	to the "Error response format" sheet for	r error response	3				

Body uses JSON format.

detailed list

URI		/v1/clusters/{cluster_id}/nodes/{fabric_type}//node_id}/interfaces/physical-ifs?format=detail-list									
message	code	body	type	required	Allow nul	Allow empty	overview	remarks			
request	-	_	-	-	-	-	-	_			
	200	physical ifs object[] O × O Physical IF ID list information -									
response	200	Same as information in "physical if" object in the "010802" sheet									
	Refer to the "Error response format" sheet for error response										

	Getting information of physical interface
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	_
fabric_type	string	Device type	"spines": Spine "leafs": Leaf
node_id	string	Device ID	_
if_id	string	Physical IF ID	_

URI /v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-ifs/[if_id]

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	=	_	-	-	-	-	-
		physical_if	object	0	×		Physical IF information	-
		physical_if_id	string	0	×		Physical IF ID	_
		opposite_if	object	×	0		Counter IF information	Designated only when facing IF exists
		fabric_type	string	0	×		Device type	"spine": Spine "leaf": Leaf
		node_id	string	0	×		Device ID	_
		if_type	string	0	×		IF type of the opposite device	"physical-if": Physical IF "breakout-if": breakoutIF
	200	if_id	string	0	×		IF ID of the opposite device	-
	200							
response								
•								
							TE	0 '5 "1'5 1' '
		speed	string	×	0	_	IF speed	Specify null if speed is not set.
		if_name	string object	Ô	×	_	IF name	Specify null if speed is not set.
		qos remarks	boolean	0	×	_	QoS capability information Remark function capability	
		remarks	boolean	O	^		Remark function capability	Specify a list of configurable remark
		remarks_capability	string[]	×	0	0	Remark menu list	menu.
		shaping	boolean	0	×		Shaping function capability	–
		egress_queue_capability	string[]	×	Ô	0	Egress queue menu list	Specify a list of egress queue menu.
		breakout	object	×	Ö	<u> </u>	Breakout IF information	Breakout IF Only when registered
		speed	string	Ω	×		IF speed after separation	-
		ifs	obiect[]	Ö	×	×	-	-
		physical_if_id	string	Ö	×		Breakout IF physical ID ID	-
		if name	string	Ö	×		IF name of breakout IF	-
	Refer	to the "Error response format" sheet for e						•

Interface name	Updating physical interface
Method	PUT

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	=
fabric_type	string	Device type	"leafs": Leaf ※Fixed leafs
node_id	string	Device ID	-
if_id	string	Physical IF ID	-

URI	/v1/clusters/	cluster id	/nodes/	fabric type	/{node	id]/interface:	s/physical-ifs/{if_id}

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
	-	action	string	0	×		Control type	"speed_set" : Physical port registration "speed_delete" : Physical port deletion
request		speed	string	×	0		IF speed	Only the port speed specified in the IF information definition can be specified when model information of the target device is registered
response	200	- o the "Error response format" she						

Interface name	Creating or deleting breakout interface
Method	PATCH

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	=
fabric_type	string	Device type	"spines": Spine "leafs": Leaf
node_id	string	Device ID	-

option parameter	type	required	overview	remarks	
notification_address	string	0	Destination address to notify completion of operation	See "Asynchronous request format" sheet	
notification_port	string	0	Destination port to notify completion of operation	See Asynchronous request format sheet	

URI /v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/breakout-ifs

message	code	body	type	required	Allow pul	Allow empty	overview	remarks			
request	Code	1	object[]	O	×		List of the target breekent IE	Set breakout IF to create of delete. Don't specify both "add" and " remove" at the same time.			
		ор	string	0	×		Operation type for the target breakout IF	"add": Oreating breakout IF "remove": Deleting breakout IF When creating, specifying "spines" in fabric_type at URI parameter results in an error.			
	-	path	string	0	×		Breakout IF ID	"add": "/" + "breakout IF ID for creating" "remove": "/" + "breakout IF ID for deleting" - To specify multiple breakout IF ID, specify different op/path Specify all the breakout IF IDs to be created to separate			
		value	object	×	0		Breakout IF information	Required for creating. Setting it when deleting causes an error.			
		base_if	string	0	×		Information on physical IF to be separated	=			
		physical_if_id	string	0	×		Physical IF ID to be separated	-			
		division_number	int	0	×	\parallel	Number of Ifs to separate	-			
		breakout_if_speed	string	0	×		IF speed after separation	-			
		operation_id	string	0	×		ID for acquiring information of asynchronous operation	=			
response	Refer t	efer to the "Error response format" sheet for error response									

Body uses JSON format.

Asynchronous response

message	code	body	type	required	Allow nul	Allow empty	overview	remarks		
	201	breakout_if_ids	string[]	0	×	×	Breakout IF ID list			
	204	-	-	-	-	-	=	i		
	Refer	Refer to the "Error response format" sheet for error response								

Interface name	Getting list of breakout interfaces
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
fabric_type	string	Device type	"spines":Spine "leafs":Leaf
node_id	string	Device ID	

option parameter	type	required	Allow nul	Allow empty	overview	remarks
format	string	-	0		Get information type	"detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list"

URI /v1/clusters/(cluster_id)/nodes/(fabric_type)/(node_id)/interfaces/breakout-ifs
/v1/clusters/(cluster_id)/nodes/(fabric_type)/(node_id)/interfaces/breakout-ifs?format=list

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	-	-	-	-	-		-
######################################	200	breakout_if_ids	string[]	0	×	0	Breakout IF ID list	_
response Refer to the "Error response format" sheet for error response								

Body uses JSON format.

detailed	list

actanea not	ACCURICATION							
URI	RI /v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/breakout-ifs?format=detail-list							
message	code	body	type	required	Allow nul	Allow empty	overview	remarks
wa mu a a t		_	_	1_	_	_		

Interface name	Getting information of breakout interface
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
fabric_type	string	Device type	"spines":Spine "leafs":Leaf
node_id	string	Device ID	=

URI /v1/clusters/lcluster idl/nodes/lfabric typel/lnode idl/interfaces/breakout-ifs/lbreakout if id

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	-	-	-	-		_	-
		breakout_if	object	0	×		Breakout IF information	-
		breakout_if_id	string	0	×		Breakout IF ID	-
		speed	string	0	×		IF speed	-
		if_name	string	0	×		Breakout IF name	-
		base_if	object	0	×		Base IF	-
	200	physical_if_id	string	0	×		Physical IF ID	-
response	200							
		qos	object	0	×		QoS capability information	_
		remarks	boolean	0	×		Remark function capability	_
		remarks_capability	string[]	×	0	0	Remark menu list	Specify a list of configurable remark menu.
		shaping	boolean	0	×		Shaping function capability	_
		egress_queue_capability	string[]	×	0	0	Egress queue menu list	Specify a list of egress queue menu.
	Refer t	to the "Error response format" she	et for error response					

Interface name	Getting list of internal-link interfaces
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	_
fabric_type	string	Device type	"spines" : Spine "leafs" : Leaf
node_id	string	Device ID	_

option parameter	type	required	overview	remarks
format	string	-	Get information type	"detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list"

list

UF) i	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/internal-link-ifs
OI	VI.	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/internal-link-ifs?format=list

message	code	body	type	requir	Allow	Allow	overview	remarks	
request	-	-	-	-	-	-	-	_	
waananaa	200	internal_link_if_ids	string[]	0	×	0	internal link IF ID list	-	
response	Refer to the "Error response format" sheet for error response								

Body uses JSON format.

detailed list

URI	/v1/clusters/(cluster_id]/nodes/(fabric_type)/(node_id]/interfaces/internal-link-ifs?format=detail-list								
message	code	body	type	requir	Allow	Allow	overview	remarks	
request	-	_	-	-	-	-	_	-	
	200	internal_link_ifs	object[]	0	×	0	internal link IF ID list	-	
response	200	Same as information in "internal_link_if" object in the "011002" sheet							
	Refer to the "Error response format" sheet for error response								

Interface name	Getting information of internal-
Method	GFT

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	_
fabric_type	string	Device type	"spines" : Spine "leafs" : Leaf
node_id	string	Device ID	=
internal_link_if_id	string	Internal link IF ID	_

URI /v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/internal-link-ifs/{internal_link_if_id}

message	code	body	type	required	Allow nul	Allow empty	overview	remarks		
request	-	i	-	-	-	-	-	_		
		internal_link_if	object	0	×		Internal link IF information	_		
		internal_link_if_id	string	0	×		Internal link IF ID	_		
	200	lag_if_id	string	×	0		LagIF ID	Specify one of lag_if_id, physical_if_id, and breakout if id.		
response		physical_if_id	string	×	0					
		breakout_if_id	string	×	0		BreakoutIF ID	and breakout_ii_id.		
	Refer to the "Error response format" sheet for error response									

Interface name	Creating Link-aggregation interfac
Method	POST

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	_
fabric_type	string	Device type	"leafs":Leaf Fixed "leaf"
node_id	string	Device ID	-

option parameter	type	required	overview	remarks
notification_address	string	0	Destination address to notify completion of operation	See "Asynchronous request
notification_port	string	0	Destination port to notify completion of operation	format" sheet

URI /v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/lag-ifs

message	code	body	type	required	Allow nu	Allow e	overview	remarks		
roquost		physical_if_ids	string[]	0	×	0	Physical IF ID list	Specify one of physical_if_ids, breakout_if_ids.		
request		breakout_if_ids	string[]	0	×	0	breakout IF ID list	Specify one of physical_if_ids, breakout_if_ids.		
roononoo	202	operation_id	string	0	×		ID for acquiring information of asynchronous operation	-		
response	Refer to	Refer to the "Frror response format" sheet for error response								

Body uses JSON format.

Asynchronous response

message	code	body	type	required	Allow nu	Allow er	overview	remarks
response	201	lag_if_id	string	0	×	/	LagIF ID	_
	Refer to	the "Error response format" sheet fo	r error respo	nse				

Interface name	Getting list of Link-aggregation interfa
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
fabric_type	string	Device type	"spines": Spine "leafs": Leaf
node_id	string	Device ID	_

option parameter	type	required	overview	remarks
format	string	-	Get information type	"detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list"

list

LIDI	/v1/clusters/[cluster_id]/nodes/[fabrio_type]/[node_id]/interfaces/lag-ifs
URI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/lag-ifs?format=list

message	code	body	type	requir	Allow	Allow	overview	remarks
request	_	-	-	_	-	-	_	-
20	200	lag_if_ids	string[]	0	×	0	Lag IF ID list	-
response	Refer to	the "Error response format" sheet for err	or response					

Body uses JSON format.

detailed list

URI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/lag-ifs?format=detail-list									
message	code	body	type	requir	Allow	Allow	overview	remarks		
request	-	-	-	-	-	I -	=	-		
response	200	lag_ifs Same as information in "lag if" object	object[] in the "011003"	Oshee	×	0	Lag IF ID list	-		
	Refer to	Same as information in large object in the Orthod Sheet								

Interface name	Getting information of Link-aggregat
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
fabric_type	string	Device type	"spines": Spine "leafs": Leaf
	string	Device ID	_
lag_if_id	string	Internal link IF ID	-

URI /v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/lag_ifs/{lag_if_id}

message	code	bod	у	type	required	Allow	Allow	overview	remarks			
request	-	-		-	-	_	-	_	-			
		lag_i	f	object	0	×	/	Lag IF information	-			
		l.	ag_if_id	string	0	×	/	Lag IF ID	_			
		i i	nt <u>ernal_options</u>	object	×	0		Lag IF information for internal link	Set only for internal link			
			ipv4_address	string	0	×		IPv4 address	-			
			opposite_if	object	0	×		Opposite IF information	-			
			fabric_type	string	0	×		Opposite device type	"spine" : Spine "leaf" : Leaf			
			node_id	string	0	×	/	Opposite device ID	_			
			lag_if_id	string	0	×	/	Opposite Lag IF ID	_			
		r	ninimum_links	int	0	×	/	Minimum links	_			
	200	S	peed	string	0	×	/	IF speed	_			
response	200	i	f_name	string	0	×		Lag IF name	-			
		ΙĖ	hysical_if_ids	string[]	0	×	0	Physical IF ID	Specify one of physical_if_ids, breakout_if_ids.			
			b	b	t	ŀ	breakout_if_ids string[] O × O Breakout IF ID	Breakout IF ID	Specify one of physical_if_ids, breakout_if_ids.			
		0	jos	object	0	×	/	QoS capability information	_			
					remarks	boolean	0	×	/	Remark function capability	-	
						remarks_capability	string[]	×	0	0	Remark menu list	Specify a list of configurable remark menu.
							shaping	boolean	0	×		Shaping function capability
			egress_queue_capability	string[]	×	0	0	Egress queue menu list	Specify a list of egress queue menu.			

Interface name	Deleting Link-aggregation interface
Method	DELETE

URI parameter	type	overview	remarks
cluster_id	string	cluster ID	-
fabric_type	string	Device type	"spines": Spine "leafs": Leaf
node_id	string	Device ID	-
lag if id	string	Internal link IF ID	-

option parameter	type	required	overview	remarks
notification_address	string	0	Destination address to notify completion of operation	See "Asynchronous request format"
notification port	string	0	Destination port to notify completion of operation	sheet

URI	/v1/clusters/	{cluster_id}/nodes/	{fabric_type}/{node	id/interfaces/	′lag−ifs/{	lag if id

message	code	body	type	required	Allow	Allow	overview	remarks
request	-	_	-	-	-	-	-	_
roononoo	202	operation_id	string	0	×	/	ID for acquiring information of asynchronous operation	-
response	Refer t	to the "Error response format" sheet for	error r	esponse				

Asynchronous response

message	code	body	type	required	Allow	Allow	overview	remarks
roononoo	204	-	-	_	-	-	-	-
response	Refer	to the "Error response format" sheet for	error r	esponse				

nterface name	е	Creating inter-cluster link interface						
Method		POST						
		URI parameter	type				overview	remarks
		cluster_id	string				Cluster ID	-
		Option parameter	type required				overview	remarks
	notification_address string O			Operation completion notification address	Refer to "Asynchronous request format" for specification of			
		notification_port	string O			Operation completion notification destination port	optional parameters to URI	
JRI		/v1/clusters/[cluster_id]/interfaces/clust	er-link-ifs					
nessage	code	lbody	type	required	Allow nul A	Allow empty	loverview	remarks
пообадо	10000	cluster_link_if_id	string	X	0 _		Inter-cluster Link ID	Assigned by MFC
		opposite_cluster_id	string	0	×		Opposite cluseter ID	-
		physical link	obiect	×	0	_	Physical link information	physical link or lag link
		node id	string	0	×		Node ID(B-Leaf ID)	-
		physical_if_id	string	×	0	_	Physical IF ID	physical if id or breakout if id
		breakout if id	string	×	0		breakout IF ID	physical if id or breakout if id
		opposite node id	string	0	×		Opposite node ID(B-Leaf ID)	-
		opposite_if_id	string	×	0		Opposite physical IF ID	opposite_if_id or opposite_breakout_if_id
		opposite_breakout_if_id	string	×	0		Opposite breakout IF ID	opposite if id or opposite breakout if id
		lag link	obiect	×	0		LAG link information	physical link or lag link
eauest	_	node id	string	0	×		Node ID(B-Leaf ID)	-
equest		lag if id	string	Ō	×	_	LagIF ID	-
		opposite_node_id	string	0	×		Opposite node ID(B-Leaf ID)	-
		opposite_lag_if_id	string	0	×		Opposite LagIF ID	-
		igp_cost	int	0	×		IGP cost	-
		port_status	boolean	×	0		Port status	true:up false:down ※Default:true
		ipv4_address	string	×	0		IF address (IPv4)	**Default: Assigned by MFC Since the prefix is fixed at / 30, no parameters are required
		traffic_threshold	double	×	0	$\overline{}$	Traffic threshold	[Gbps]
	202	operation id	string	O	×	_	ID for acquiring information of asynchronous operation	

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
	201	cluster_link_if_id	string	0	×		クラスタ間リンクIF ID	-
response	Refer to	the "Error response format" sheet for error	response					

Interface name	Getting list of inter-cluster link interfaces
Method	GET

Option parameter	type	required	overview	remarks
format	string	-	Get information type	"detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list"

list for sliced users

ι	Dī	/v1/clusters/ cluster_id /interfaces/cluster-link-ifs
C	ru	/v1/clusters/ cluster_id /interfaces/cluster-link-ifs?format=list

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-		-	-	-	-	-	-
waananaa	200	cluster_link_if_ids	string[]	0	X	0	List of Inter-link IF ID	-
response	Refer	to the "Error response format" sheet for erro	or response					

Body uses JSON format.

detailed list for administrator

URI	/v1/clusters/lcluster idl/interfaces/cluster-link-ifs?format=detail-list	
Ora	/ V1/ Clusters/ (cluster_id)/ interfaces/ cluster_link_its: format=detail_list	

message	code	body	type	required	Allow nul	Allow empty	overview	remarks				
request	-	-	-			-	-	-				
	200	cluster_link_if_ids	object[]	0	X	0	List of Inter-link IF ID	-				
response Same as information in "cluster link if" object in the "011203" sheet												
	Refer to the "Error response format" sheet for error response											

Interface name	Getting information of inter-cluster link interface
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Cluseter ID	-
cluster_link_if_id	string	Inter-cluster Link ID	-

URI /v1/clusters/{cluster_id}/interfaces/cluster-link-ifs/{cluster_link_if_id}

nessage	code	body	type	required	Allow n	Allow e	overview	remarks
request	-	-	-	-	T-	-	-	-
		cluster_link_if	object	0	X	×	Inter-cluster Link information	-
		cluster_link_if_id	string	0	×		Inter-cluster Link ID	_
		opposite_cluster_id	string	0	×		Opposite cluseter ID	-
		physical_link	object	×	0		Physical link information	physical_link or lag_link
		node_id	string	0	×		Node ID(B-Leaf ID)	_
		physical_if_id	string	×	0		Physical IF ID	physical_if_id or breakout_if_id
		breakout_if_id	string	×	0		breakout IF ID	physical_if_id or breakout_if_id
		opposite_node_id	string	0	X		Opposite node ID(B-Leaf ID)	-
		opposite_if_id	string	×	0		Opposite physical IF ID	opposite_if_id or opposite_breakout_if_id
		opposite_breakout_if_id	string	×	0		Opposite breakout IF ID	opposite_if_id or opposite_breakout_if_id
	200	lag_link	object	×	0		LAG link information	physical_link or lag_link
esponse		node_id	string	0	×		Node ID(B-Leaf ID)	-
		lag_if_id	string	0	×		LagIF ID	-
		opposite_node_id	string	0	X		Opposite node ID(B-Leaf ID)	-
		opposite_lag_if_id	string	0	×		Opposite LagIF ID	_
		igp_cost	int	0	X		IGP cost	-
		port_status	boolean	0	×		Port status	true:up false:down ※Default : true
		ipv4_address	string	0	×		IF address (IPv4)	**Default: Assigned by MFC Since the prefix is fixed at / 30 no parameters are required.
		traffic threshold	double	×	0		Traffic threshold	[Gbps]

Interface name	Deleting inter-cluster link interface				
Method	DELETE				
	URI parameter	type		overview	remarks
	cluster_id	string		Cluseter ID	-
	cluster_link_if_id	string		Inter-cluster Link ID	_
	Option parameter	type	required	overview	remarks
	notification_address	string	0	Operation completion notification address	Refer to "Asynchronous request format"
	notification_port	string	0	Operation completion notification destination port	for specification of optional parameters to
	•				
URI	/v1/clusters/{cluster_id}/interfaces/cluster-	link-ifs/{clus	ter_link_if_id}		

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
request	-	-	-	-	-	-	-	_
	202	operation_id	string	0	×		ID for acquiring information of asynchronous operation	_
response	Pefer to the "Error response formet" sheet for error response							

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
roononco	204	-	-	-	-	-	-	-
response	Refer t	o the "Error response format" sheet for error re	sponse					

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-

URI /v1/clusters/{cluster_id}/points/edge-points

message	code	body	type	required	Allow nul	Allow	overview	remarks	
		leaf_node_id	string	0	X	$\overline{}$	Leaf device ID	-	
		lag_if_id	string	X	0		LagIF ID	Specify one of lag if id, physical if id, and	
request	-	physical_if_id	string	×	0		IPhysical IE II)	breakout if id.	
		breakout_if_id	string	X	0		breakoutIF ID	breakout_ii_id.	
		traffic_threshold	double	×	0		Traffic threshold	[Gbps] designation	
KOODODO	201	edge_point_id	string	0	X		edge-point ID	_	
response	Refer	to the "Error response format" she	et for er	ror respon	se				

Interface name	Getting list of edge-points
Method	GET

URI parameter	type		overview	remarks
cluster_id	string		Switch cluster ID	-
option parameter	type	required	overview	remarks
format	string	-	Get information type	"list": list "detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list" specification.
user-type	string	-	user-type	Can be specified only when "detail-list" is specified in format. "operator": Detailed list for system administrator ***Motailed list for sliced users when omitted

list

URI	/v1/clusters/{cluster_id}/points/edge-points
UKI	/v1/clusters/fcluster id}/points/edge-points?format=list

message	code	body	type	requir	Allow	Allow	overview	remarks
request	-	-	_	-	-	-	-	-
	200	edge_point_ids	string[]	0	×	0	Edge-point ID list information	-
response Refer to the "Error response format" sheet for error response								

Body uses JSON format.

detailed list for slice user

URI	/v1/clusters/{cluster_id}/points/edge-points?format=detail-list												
message code body type requir Allow Overview remarks													
request	-	-	-	1-	-	-	-	-					
	200	edge_points	object[]	0	×	0,	Edge-point ID list information	-					
response		Same as information in "edge- to the "Error response format" she				403 s	heet						

Body uses JSON format.

detailed list for administrator

URI	/v1/clusters/{clu	ister_id}/points/edge-point	s?format=detail-list&user-type=operator		
message	code body	type	requir Allow Allow overview	remarks	

message	code	body	type	requir	Allow	Allow	overview	remarks		
request	-	-	-	-	-	-	-	-		
	200	edge_points	object[]	0	×	0	Edge-point ID list information	-		
response	200	Same as information in "edge-point" object in the "011403" sheet (for administrator)								
	Refer to the "Error response format" sheet for error response									

	Getting infromation of edge-point
Method	GET

URI parameter	type	overview	remarks	
cluster_id	string	Switch cluster ID	-	
edge point id	string	edge-point ID	_	

option parameter	type	required	overview	remarks
user-type	string	-	user-type	"operator": Detailed list for system administrator **Detailed list for sliced users when omitted

detailed list for sliced user

URI /v1/clusters/[cluster_id]/points/edge_points/[edge_point_id]

message	code	body	/	type	requir	Allow	Allow	overview	remarks
request	-	-		-	-	-	-	-	-
		edge	e_point	object	0	×		Edge-point information	-
		e	dge_point_id	string	0	×		edge-point ID	-
		SI	upport_protocols	object	0	×		Support UNI connection protocol informat	_
			L2	boolean	0	×		L2 correspondence propriety	Specify true only when L2 correspondence is possible
			L3	boolean	0	×		L3 correspondence propriety	Specify true only when L3 correspondence is possible **If true is specified, it implies that it corresponds to "direct"
response	200		L3_protocols	string[]	×	0	0	Protocol list for L3	Required only if L3 is true. If unsupported, return an empty list. Described protocols are as follows. "bgp", "ospf", "static", "vrrp"
							/		
							/		
		q		object	0	×		QoS capability information	-
			remarks	boolean	0	×		Remark function capability	-
			remarks_capability	string[]	×	0		Remark menu list	Specify a list of configurable remark menu.
I			shaping	boolean	0	×		Shaping function capability	-
I			egress_queue_capability	string[]	X	0	0	Egress queue menu list	Specify a list of egress queue menu.
	Refer	to the	e "Error response format" shee	t for error respons	se			·	

Body uses JSON format.

detailed list for administrator
URI /v1/clusters/[cluster_id]/points/edge-points/[edge_point_id]?user-type=operator

nessage	code	bod	у	type	requir	Allow	Allow	overview	remarks
equest	-	-		-	-	-	-	-	-
		edg	e_point	object	0	×		Edge-point information	-
		E	edge_point_id	string	0	×		edge-point ID	-
		Ł	pa <u>se_if</u>	object	0	×	/	base_if	_
			leaf_node_id	string	0	×		leaf_node_id	_
			lag_if_id	string	×	0	/	LagIF ID	
			physical_if_id	string	×	0	/	physical_if_id	Set either lag_if_id or physical_if_id or breakout_if_id
			breakout_if_id	string	×	0	/	breakoutIF ID	
		S	support_protocols	object	0	×	/	Support UNI connection protocol informat	-
			L2	boolean	0	×	/	L2 correspondence propriety	Specify true only when L2 correspondence is possible
			L3	boolean	0	×		L3 correspondence propriety	Specify true only when L3 correspondence is possib %If true is specified, it implies that it corresponds t "direct"
esponse 200	200		L3_protocols	string[]	×	0	0	Protocol list for L3	Required only if L3 is true. If unsupported, return an empty list. Described protocols are as follows. "bgp", "static", "vrrp"
							/		
		c	os	object	0	×	/	QoS capability information	_
			remarks	boolean	0	×		Remark function capability	_
			remarks_capability	string[]	×	0	0	Remark menu list	Specify a list of configurable remark menu.
			shaping	boolean	0	×		Shaping function capability	_
			egress_queue_capability	string[]	×	0	0	Egress queue menu list	Specify a list of egress queue menu.
		t	raffic_threshold	double	×	0		Traffic threshold	[Gbps]

Interface name	Deleting edge-point
Method	DELETE

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-
edge_point_id	string	edge-point ID	-

URI	/v1/clusters/	cluster id	/points/edge-points/	edge point id	}

message	code	body	type	requir	Allow	Allow	overview	remarks
request	_	_	-	_	_	_	_	-
raananaa	204	_	-	_	_	_	_	-
Refer to the "Error response format" sheet for error response								

Interface name	Creating Slice
Method	POST

URI parameter	type	overview	remarks
slice_type	string	Slice type	"I2vpn":L2 slice "I3vpn":L3 slice

URI /v1/slices/{slice_type}

[L2 slice]								
message	code	body	type	required	Allow null	Allow empty array	overview	remarks
		slice_id	string	N	Υ		Slice ID to create	If not specified, MFC/FC will issue payout
request	_	remark_menu	string	N	Y		remark menu	Select Remark menu from below. "af1" "af2" "af3" "be" "packet_color": Follow QoS value of incoming packet When null or omitted, select the default value set at registering model information
		vrf_id	int	N	Υ		The VRF ID to be set for the slice to be created	If not specified, MFC / FC will issue payout [Parameters not shown to the host]
response	201	slice_id	string	0	×		ID uniquely paid out for each slice	-
response	Refer	to the "Error response format"	sheet f	or error r	esponse		_	_

Body uses JSON format.

message	code	body	type	roquired	Allow mull	Allow empty array	overview	remarks
illessage	code	slice id	string	•	Y			If not specified, MFC/FC will issue payout
		plane	int		N		Palansing aida	1: "A side" 2: "B side"
request	_	remark_menu	string	N	Y			Select Remark menu from below. "af1" "af2" "af3" "be" "packet_color": Follow QoS value of incoming packet When null or omitted, select the default value set at registering model information
		vrf_id	int	N	Υ		The VRF ID to be set for the slice to be created	If not specified, MFC / FC will issue payout [Parameters not shown to the host]
response	201	slice id	string	Υ	N		ID uniquely paid out for each slice	-

Interface nam Method	ne	Changing Slice		7				
		URI parameter	type				overview	remarks
		slice_type	string				Slice type	"I2vpn":L2 slice "I3vpn":L3 slice
		slice_id	string				Slice ID	-
		Option parameter	type	requir	red		overview	remarks
		notification_address notification_port	string string	0			Operation completion notification address Operation completion notification destination port	Refer to "Asynchronous request format" for specification of optional parameters to URI
URI		/v1/slices/{slice_type}/{	slice_id}					
message								
III GGGGG	code	body	type	requir	Allow nu	Allow empty	overview	remarks
message	code	action action	type string	requir	Allow nu	Allow empty	overview Control type	remarks 【リマークメニュー変更系要求】(非同期) "update remark menu": "リマークメニュー変更 Orny wifen action is "updace remark_infenu

string O at" sheet for erro

response

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	requir	Allow nul	Allow empty	overview	remarks
********	200	updated_cp_ids	string[]	0	X	0	List of IDs of CPs whose statuses have been updated	If there is no updated CP, an empty list.
response	Refer to the "Error response format" sheet for error response							

ID for acquiring information of asynchronous operation

In the case of the slice which already created any CPs, if capability of "remark menu" of the switches witch any CPs is "false", it can set only

Interface name Method	Deleting Slice DELETE			
	URI parameter	type	overview	remarks
	slice_type	string	Slice type	"l2vpn":L2 slice "l3vpn":L3 slice
	slice_id	string	Slice ID	-

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
request	-	-	-	-	_	_	-	-
roononoo	204	_·	-	-	_	1	-	-
response	Refer to the "Error response format" sheet for error response							

Interface name	Getting Slice Informat	tion		
Method	GET			
	URI parameter	type	overview	remarks
	slice_type	string	Slice type	"l2vpn": L2 slice

URI parameter	type	overview	remarks
slice_type	string		"l2vpn":L2 slice "l3vpn":L3 slice
slice_id	string	Slice ID	_

/v1/slices/[slice_type]/[slice_id]

[L2 slice]

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
request	-	-	-	-		-		-
		I2_slice	object	Υ	Ν		L2 slice information	-
	200	slice_id	string	Υ	N		Slice ID	-
response	200	I2_cp_ids	string[]	Υ	N	Υ	Related L2 CP list information	-
		remark_menu	string	N	Υ		Remark menu set for slice	-
	Refer	to the "Error response format"	sheet for err	or respons	se		<u>. </u>	

Body uses JSON format.

[L3 slice]

LO SIICE								
message	code	body	type	required	Allow null	Allow empty array	overview	remarks
request	-	-	-	-	-	-	-	-
		I3_slice	object	Υ	N		L3 slice information	-
		slice_id	string	Υ	N		Slice ID	-
response	200	plane	int	Υ	N		Belonging side	1 : "A side" 2 : "B side"
		I3_cp_ids	string[]	Υ	N	Υ	Related L3 CP list information	-
		remark_menu	string	N	Υ		Remark menu set for slice	_
	Refer t	to the "Error response format	" sheet for en	ror respon	se			

Interface name	Getting Slice Information Lists
Method	GET

URI parameter	type	overview	remarks
slice_type	string	Slice type	"l2vpn":L2 slice "l3vpn":L3 slice

Optional parameters	type	required	overview	remarks
format	string	-	Get information type	"list" : list "detail-list" : detail list *When omitted, same as "list" specification

[Only slice list]

/v1/slices/{slice_type} /v1/slices/{slice_type}?format=list URI

[L2 slice]

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
request	-	-	-	-	-	-	-	-
rocponco	200	I2_slice_ids	string[]	Υ	N	Υ	L2 slice ID information list	-
response	Refer t	to the "Error response forma	t" sheet for e	rror respo	onse			

Body uses JSON format.

[L3 slice]

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
request	-	-	-	-	-	-	-	-
roonanaa	200	I3_slice_ids	string[]	Υ	N	Υ	L3 slice ID information list	-
response	Refer	to the "Error response forma	t" sheet for e	error respo	onse			

Body uses JSON format.

[Detailed information list]
URI |/v1/slices/[slice_type]?format=detail-list

[L2 slice]

message	code	body	type	required	Allow null	Allow empty array	overview	remarks		
request	_		-	-	-		_	-		
	200	I2_slices	object[]	Υ	N		L2 slice ID information list	-		
response	Information on the contents of the I2 slice object of "020104_Get slice"									
Refer to the "Error response format" sheet for error response										

Body uses JSON format.

[L3 slice]

LO SIICE												
message	code	body	type	required	Allow null	Allow empty array	overview	remarks				
request	-	_	-	-	-	-	-	-				
	200		object[]		N		L3 slice ID information list	-				
response	200	Information on the contents of the I3_slice object of "020104_Get slice"										
	Refer t	Refer to the "Error response format" sheet for error response										

URI parameter	type		overview	remarks
- **	string		slice type	"I2vpn": L2 slice "I3vpn": L3 slice
slice_id	string		slice ID	=
Optional parameters	type	required	overview	remarks
notification_address	string	Υ	Operation completion notification address	Refer to "Asynchronous request format" for specification
notification_port	string	Υ	Operation completion notification destination port	of optional parameters to URI

URI /v1/slices/Islice typel/Islice idl/cr

message	code	bodv	ts	vpe	required	Allow null	Allow empty array	overview	remarks
IIIVVIIIIV		(nameless)		bject[]	Υ	N		List of operation target CP information	Set for the number of CPs to be created or deleted. CF generation and CP deletion can not be specified at the same time.
		ор	s	tring	Υ	N		Operation type to be executed for the operation target CP	Specify "add" when generating CP Specify "remove" when deleting CP [Setting value not shown to the host] Specify "replace" when changing CP
		path	8	tring	Υ	N		Destination point indicating operation target CP	Sheedy Feelbace when channel CP When CP is generated CHE When CP is in not specified When Specified When Specified CP ID: "/" + "Generated CP ID" When specifying the CP ID: "/" + "Generated CP ID" When deleting CP: "/" + "Delete CP ID" [Setting value not shown to the top] CP channe: "/" + "Channe CP ID"
		value	o	bject	N	Υ		[For the host] Generate CP information. [For MFC-FC Between]	[For the host] Required when CP generation. When deleting CP it is arerror if it is specified.
								CP information to generate or change	[For MFC-FC Between] When creating CP, change when CP is required. [For the host]
		cluster_id	s	tring	Υ	N		Switch cluster ID	[For MFC-FC Between] Required when CP generation. Can not be specified who changing CP
		edge_point_id	s	tring	Y	N		Edge-point ID to be created for CP	[For the host] [For MFC-FC Between] Required when CP generation. Can not be specified who changing CP.
request	-	vlan_id	ir	nt	Υ	N		VLAN ID	[For the host] [For MFC-FC Between] Required when CP generation. Can not be specified whencheneine CP.
		pair_cp_id		tring	N	Υ		Pair CP ID in multihomed configuration	Designate when multihomed
		ingress_sha		bject loat	N N	Y		QoS setting information ingress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps].
		egress_sha	ping_rate fl	loat	N	Υ		engress shaping rate	Null or omitted, there is no limit. Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
		egress_que	ue_menu s	tring	N	Υ		egress_queue_menu	Null or omitted, there is no limit. Specify the egress queur menu. Null or omitted, select the default value set at regist model information.
		esi	s	tring	N	Υ		ESI value	Required when changing CP [Setting value not shown to the host]
		lacp_system_in	d s	tring	N	Υ		LACP system-id	Required when changing CP [Setting value not shown to the host]
		port_mode	2	tring	Υ	N		VLAN port mode	For the heat Access mode Trunk Trunk mode [For MFC-FC Between] changing CP Access: Access mode Trunk Trunk mode Trunk Trunk mode
	202	operation id	-	tring	v	N		ID for getting information on asynchronous operation	

Body uses JSON format.

Asynchronous response
The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103_Getting infromation of d" IF.

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
		cp_ids	string[]	Υ	N		List of generated CP ID	Response upon generation of CP
	204	-	-		-			Response when deleting CP
response	200	-	-	-	ı		_	Response when only CP change is executed. When CP generation / CP deletion and CP change are executed at the same time, they respectively respond at the time of CP generation or response at response to CP deletion. [Response code not shown to the Rest client]
	Refer t	to the "Error response format" s	heet for error	response				

nessage	code	body		type	required	Allow null	Allow empty array	overview	remarks
icoouge	COUC	(nameless)		object[]	Y	N	N	List of operation target CP information	Set for the number of CPs to be created or deleted. Of generation and CP deletion can not be specified at the
		ор		string	Υ	N		Operation type to be executed for the operation target CP	same time. Specify "add" when generating CP Specify "remove" when deleting CP [Setting value not shown to the top]
		path		string	Y	N		Destination point indicating operation target CP	Specify "replace" when channing CP When CP is generated When CP ID is not specified: "/" is specified When CP ID is not specified: "/" is specified When specifying the CP ID." "" -" Generated CP ID" CP deleted: "/" + "Delete CP ID" [Setting value not shown to the top] CP chanse: "" + " Chanse CP ID"
		value		object	-	N		Generate CP information.	Required when CP generation. When deleting CP it is a error if specified
		cluste	er id	string	Υ	N		SW cluster ID	-
		edge_	point_id	string	Υ	N		CP creation destination edge-point ID	-
		vlan_i	1	int	Υ	N		VLAN ID	VLAN ID of CP 0 to 4096 (0 is used as a physical port)
		mtu		int	Υ	N		MTU value per CP IF	-
		gos		object	N	Y		QoS setting information	-
		ШГ	ress_shaping_rate	float	N	Y		ingress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted there is no limit
request	-	ego	ress_shaping_rate	float	N	Υ		engress shaping rate	Null or consttee, there is no limit. Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
		eg	ress_queue_menu	string	N	Υ		egress_queue_menu	Null or omitted, there is no limit. Specify the egress queur menu. Null or omitted, select the default value set at register model information.
		inu4 s	ddress	string	N	Υ	_	Storage device IF address (IPv4)	Either jpv6 addr is required
			ddress	string	N	Ý	_	Housing equipment IF address (IPv6)	Either ipv6_addr is required
		ipv4_p		int	N	Y	$\overline{}$	Housing equipment IF prefix (IPv4)	0~31 Either ipv4 addr is required
		ipv6_p	refix	int	N	Υ	$\overline{}$	Housing equipment IF prefix (IPv6)	0~64 Either ipv6 addr is required
		hen		object	N	Υ	$\overline{}$	Information for BGP	Specified when setting "bgp"
		rol	e	string	Υ	N		Role information	"master" "slave"
		nei	ighbor as	int	Υ	N		Opposing AS number	
			ghbor_ipv4_address	string	Ň	Y		Counter device IPv4 address	Required when ipv4_addr is specified
			ighbor ipv6 address	string	N	Υ		Counter device IPv6 address	Required when jpv6 addr is specified
		statio	routes	obiect∏	N	Υ	N	Static Route Information List	Specified when setting "static"
		ade	dr_type	string	Υ	N		IP address type	"ipv4" "inv6"
		adi	dress	string	Υ	N	$\overline{}$	destination address	-
			efix	int	Ý	N		Destination prefix	1-
	1)	ne	xt_hop	string	Y	N		NEXT HOP	-
		vrrp		object	N	Y		Information for VRRP	Specified when setting "vrrp"
			oup_id	int	Y	N		VRRP group ID	-
		rol		string	Y	N		The role of VRRP to configure	"master" "slave"
	1)	- in	tual ipv4 address	string	N	Υ	$\overline{}$	Virtual IF address (IPv4)	Required when jov4 addr is specified
	1)		threshold	string	N	Y		traffic threshold	[Ghns]
esponse	202	operation ic		string	V	N		ID for getting information on asynchronous operation	L.
			response format" s		r reenone			out	+

Body uses JSON format.

Asynchronous response
The result of the asynchronous response is set by being set in "processing result information (status,code)" and "response body part (body)" of "000103_Getting information of d" F.

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
	201	cp_ids	string[]	Υ	N	Υ	List of generated CP ID	Response upon generation of CP
response	204	-	-	-	-		-	Response when deleting CP
	Refer	to the "Error response format" s	sheet for error	response				

	URI parameter	type	overview	remarks
ĺ	slice_type	string	slice type	"I2vpn":L2 slice "I3vpn":L3 slice
	slice_id	string	slice ID	-

Optional parameters	type	required	overview	remarks
notification_address	string	Υ	Operation completion notification address	Refer to "Asynchronous request format" for specification
notification_port	string	Υ	Operation completion notification destination port	of optional parameters to URI

URI /v1/slices/{slice_type}/{slice_id}/cps

L2 CP

nessage	code	body	type	required	Allow null	Allow empty array	overview	remarks
		cluster_id	string	Υ	N		Switch cluster ID	-
		edge_point_id	string	Υ	N		Edge-point ID to be created for CP	-
		vlan_id	int	Υ	N		VLAN ID	VLAN ID of CP
		cp_id	string	N	Υ		Create CP ID	When using the specified parameter from the higher rank
		pair_cp_id	string	N	Υ		Pair CP ID in multihomed configuration	When using specified parameters from the host
		qos	object	N	Υ		QoS setting information	-
request	_	ingress_shaping_rate	float	N	Υ		ingress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
		egress_shaping_rate	float	N	Υ		engress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
		egress_queue_menu	string	N	Υ		egress_queue_menu	Specify the egress queur menu. Null or omitted, select the default value set at registering model information.
		port_mode	string	Υ	N		Port mode of VLAN	"access": Access mode "trunk": Trunk mode
esponse	202	operation_id	string	Υ	N		ID for getting information on asynchronous operation	_

Body uses JSON format.

Asynchronous response
The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103_Getting infromation of d" IF.

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
response	201	cp_id	string	Υ	N		Generated CP ID	-
	Refer	to the "Error response format	t" sheet for e	ror respo	nse			

Т	3	CP	

essage	code	body	type	required	Allow null	Allow empty array		remarks
		cluster_id	string	Υ	N		SW cluster ID	-
		edge_point_id	string	Υ	N		CP creation destination edge-point ID	=
		. dan dal		Υ	N		VLAN ID	VLAN ID of CP
		vlan_id	int	Ť	IN			0 to 4096 (0 is used as a physical port)
		mtu	int	Υ	N		MTU value per CP IF	-
		cp id	string	N	Υ		Create CP ID	When using specified parameters from the higher rank
		gos	object	N	Υ		QoS setting information	_
		ingress_shaping_rate	float	N	Υ		ingress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
		egress_shaping_rate	float	N	Υ		engress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
		egress_queue_menu	string	N	Υ		egress_queue_menu	Specify the egress queur menu. Null or omitted, select the default value set at registerin model information.
		ipv4 address	string	N	Υ		Storage device IF address (IPv4)	Either ipv6 addr is required
		ipv6 address	string	N	Y		Housing equipment IF address (IPv6)	Either ipv4_addr is required
quest	-	ipv4_prefix	int	N	Υ		Housing equipment IF prefix (IPv4)	0~31 Either ipy4 addr is required
		ipv6_prefix	int	N	Υ		Housing equipment IF prefix (IPv6)	0~64 Either ipv6 addr is required
		bgp	obiect	N	Υ		Information for BGP	Specified when setting "bgp"
		role	string	Y	N		Role information	"master" "slave"
		neighbor as	int	Υ	N		Opposing AS number	-
		neighbor_ipv4_address	string	N	Y		Counter device IPv4 address	Required when ipv4_addr is specified
		neighbor_ipv6_address	string	N	Ÿ		Counter device IPv6 address	Required when ipv6_addr is specified
		static routes	object[]	N	Y	N	Static Route Information List	Specified when setting "static"
		addr_type	string	Y	N		IP address type	"ipv4" "ipv6"
		address	string	Y	N		destination address	_
		prefix	int	Y	N		Destination prefix	-
		next hop	string	Ý	N		NEXT HOP	_
		vrrp	object	N	v		Information for VRRP	Specified when setting "vrrp"
		group id	int	V	N		VRRP group ID	_ Copecined when setting virp
		role	string	Y	N		The role of VRRP to configure	 "master" "slave"
		virtual_ipv4_address	string	N	Υ		Virtual IF address (IPv4)	Required when ipv4_addr is specified
		traffic threshold	double	N	Y		traffic threshold	[Gbps]
	202	operation_id	string	V	N		ID for getting information on asynchronous operation	
ponse		to the "Error response forma			1.4		וסו בעון איז פינטווא וויסיוומנוטוו סוו מאן ויסיו פינע וויסיויסיו פינע וויסיוומנוטוויסיו פינע	

Body uses JSON format.
Asynchronous response
The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103_Getting infromation of d" IF.

message	code	body	type	required	Allow null	Allow empty array	overview	remarks
response	201	cp_id	string	Υ	N		Generated CP ID	-
	Refer	to the "Error response forma	t" sheet for er	ror respo	nse			

Interface name	Changing CP
Method	PUT

URI parameter	type	overview	remarks
slice_type	string		"l2vpn":L2 slice "l3vpn":L3 slice
slice_id	string	Slice ID	-
cp_id	string	CP ID	-

Option parameter	type	required	overview	remarks
notification_address	string	0	Operation completion notification address	Refer to "Asynchronous request format" for
notification_port	string	0	Operation completion notification destination port	specification of optional parameters to URI

URI /v1/slices/{slice_type}/{slice_id}/cps/{cp_id}

L2 CP

message	code	body		type	required	Allow nul	Allow empty	overview	remarks
		action	n	string	0	X		Control type	"update"
		updat	e_option	object	×	0		Option information	Required when "action" is "update".
		qo	s_update_option	object	×	0		QoS update option	_
request -			ingress_shaping_rate	float	×	0		ingress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
	-		egress_shaping_rate	float	×	0		engress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
			egress_queue_menu	string	×	0		egress_queue_menu	Specify the egress queur menu. Null or omitted, select the default value set at registering model information.
raananaa	202	opera	tion_id	string	0	X		ID for getting information on asynchronous operation	1
response	Refer	to the	"Error response forma	t" sheet for e	rror respo	nse			

Body uses JSON format.

Asynchronous response
The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	required	Allow nul	Allow empty	overview	remarks	
roononoo	200	-	-	_	-	-	-	-	
response	Refer to the "Error response format" sheet for error response								

Body uses JSON format.

L3 CP

message	code	body		type	required	Allow nul	Allow empty	overview	remarks
		actio	n	string	0	×		Control type	"update"
		updat	te_option	object	×	0		Option information	Required when "action" is "update".
		qq	s_update_option	object	×	0		QoS update option	_
request			ingress_shaping_rate	float	×	0		ingress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps]. Null or omitted, there is no limit.
	-		egress_shaping_rate	float	×	0		engress shaping rate	Specify a value in 1 / 10th of IF to create CP. Unit is [Gbps].
							$\overline{}$		Null or omitted, there is no limit. Specify the egress queur menu.
			egress_queue_menu	string	×	0		egress_queue_menu	Null or omitted, select the default value set at registering model information.
202 operation id string		string	0	×		ID for getting information on asynchronous operation	1		
Refer to the "Error response format" sheet for error response									

Body uses JSON format.

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
roononoo	200	-	-	-	-	-	-	
response Refer to the "Error response format" sheet for error response								

Interface name	Deleting CP
Method	DELETE

URI parameter	type	overview	remarks
slice_type	string		"l2vpn":L2 slice "l3vpn":L3 slice
	string	Slice ID	-
cp_id	string	CP ID	-

Optional parameters	type	required	overview	remarks
notification_address	string	Υ	Operation completion notification address	Refer to "Asynchronous request format" for
notification_port	string	Υ	Operation completion notification destination port	specification of optional parameters to URI

URI /v1/slices/{slice_type}/{slice_id}/cps/{cp_id}

message	code	body	type	required	Allow nul	Allow empty	overview	remarks			
request	-	-	-	_	-	_	-	i -			
	202	operation_id	string	Υ	N	/	ID for getting information on asynchronous operation	-			
response	Refer to										

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	required	Allow nul	Allow empty	overview	remarks
response	204	_	-	-	-	_	-	-
	Refer to the "Error response format" sheet for error response							

Interface name	Getting CP Information
Method	GET

URI parameter	type	overview	remarks
slice_type	string		"l2vpn" : L2 slice "l3vpn" : L3 slice
slice_id	string	Slice ID	=
cp_id	string	CP ID	=

L2 CP

message	code	body	/	type	required	Allow null	Allow empty array	overview	remarks
request	-	-		-	-	-	-	-	=
		12_cp		object	Υ	Ν		L2CP information	-
		С	p_id	string		N		L 2CP ID	-
			air_cp_id	string	N	Υ		Pair L2CP ID	=
			lice_id	string	Υ	N		Slice ID	=
			luster_id	string		N		SW cluster ID	=
		е	dge_point_id	string		N		CP creation destination edge-point ID	=
		v	lan_id	int	Υ	Ν		VLAN ID	VLAN ID of CP
		р	ort_mode	string	Υ	N		Port mode of VLAN	"access": Access mode "trunk": Trunk mode
	200	е	si	string	N	Υ		Current ESI setting value	ESI value currently set for the device
response	200	la	cp_system_id	string	N	Υ		Current LACP system id setting value	LACP system id ESI value currently set for the device
		q	os	object	Υ	Ν		QoS setting information	=
			remark	boolean	Υ	Ν		Remark function capability	-
			remark_capability	string[]	N	Υ	Υ	Remark menu list	=
			shaping	boolean	Υ	Ν		Shaping function capability	-
			ingress_shaping_rate	float	N	Υ		ingress_shaping_rate	[Gbps]
			egress_shaping_rate	float	N	Υ		egress_shaping_rate	[Gbps]
			egress_queue_capability	string[]	N	Υ	Υ	Egress queue menu list	-
			remark_menu	string	Υ	Υ		Remark menu	-
			egress_queue_menu	string	Υ	Υ		Egress_queue_menu	-
l	Refer	to the	e "Error response format" sh	neet for error	response			·	

Body uses JSON format.

LJ	UP	
ma	0000	_

uest		body	type	requireu	Allow Hull	Allow empty array	overview	remarks
	-		-	-	-	=	-	-
		13_cp	object	Υ	N		L3CP information	-
		cp_id	string	Υ	N		L3CP ID	-
		slice_id	string	Υ	N		Slice ID	-
		cluster_id	string	Υ	N		SW cluster ID	-
		edge_point_id	string	Υ	N		CP creation destination edge-point ID	=
		vlan_id	int	Υ	N		VLAN ID	VLAN ID of CP 0 to 4096 (0 is used as a physical port)
		mtu	int	Υ	N		MTU value per CP IF	-
		ipv4_address	string	N	Υ		Storage device IF address (IPv4)	Described only when it is set
		ipv6_address	string	N	Υ		Housing equipment IF address (IPv6)	Described only when it is set
		ipv4_prefix	int	N	Υ		Housing equipment IF prefix (IPv4)	0~31 Either ipv4_addr is required
		ipv6_prefix	int	N	Υ		Housing equipment IF prefix (IPv6)	0∼64 Either ipv6 addr is required
		bgp	object	N	Υ		Information for BGP	Specified when setting "bgp"
		role	string	Υ	N		Role information	"master" "slave"
		neighbor_as	int	Υ	N		Opposing AS number	=
		neighbor_ipv4_address	string	N	Υ		Counter device IPv4 address	Described only when it is set
		neighbor_ipv6_address	string	N	Υ		Counter device IPv6 address	Described only when it is set
		static_routes	object[]	N	Υ	N	Static Route Information List	Described only when "static" is specified
		addr_type	string	Υ	N		IP address type	"ipv4" "ipv6"
	200	address	string	Υ	N		destination address	-
onse	200	prefix	int	Υ	N		Destination prefix	-
		next_hop	string	Υ	N		NEXT HOP	-
		vrrp	object	N	Υ		Information for VRRP	Described only when "vrrp" is specified
		group_id	int	Υ	N		VRRP group ID	_
		role	string	Υ	N		The role of VRRP to configure	"master" "slave"
		virtual_ipv4_address	string	N	Υ		Virtual IF address (IPv4)	Described only when it is set
		qos	object	Υ	N		QoS setting information	=
		remark	boolean	Υ	N		Remark function capability	-
		remark_capability	string	N	Υ	Υ	Remark menu list	_
		shaping	boolean	Υ	N		Shaping function capability	-
		ingress_shaping_rate	float	N	Υ		ingress_shaping_rate	[Gbps]
		egress_shaping_rate	float	N	Υ		egress_shaping_rate	[Gbps]
		egress_queue_capability	string[]	N	Υ	Υ	Egress queue menu list	-
		remark_menu	string	Υ	Υ		Remark menu	=
		egress_queue_menu	string	Υ	Υ		Egress_queue_menu	-
		traffic_threshold	string	N	Υ		traffic_threshold	[Gbps]
		support_protocols	string[]	Y	N		Support UNI connection protocol information	List of supported protocol information "Bgp" "Static" "Vrrp" % I3_edge_point does not describe because it alway

Interface name	Getting CP information List
Method	GET

URI parameter	type	overview	remarks	
slice_type	string	Slice type	"l2vpn" : L2 slice "l3vpn" : L3 slice	
slice_id	string	Slice ID	-	

Optional parameters	type	required	overview	remarks
format	string	-	Get information type	"list" : list "detail-list" : detail list **When omitted same as "list" specification

Information list

LIDI	/v1/slices/[slice_type]/[slice_id]/cps/
UKI	/v1/slices/[slice_type]/(slice_id)/cps/?format=list

L2 CP

message	code	body	type	requir	Allow nul	Allow empty	overview	remarks			
request	-	-	_	-	_	-	_	-			
waa manaa	200	I2_cp_ids	string[]	Υ	N	Υ	L2CP ID list information	-			
response	Refer t	to the "Error response format"	sheet for er	ror res	nonse						

Body uses JSON format.

L3 CP

message	code	body	type	requir	Allow nul	Allow empty	overview	remarks
request	-	-	-	-	-	-	_	-
waananaa	200	I3_cp_ids	string[]	Υ	N	Υ	L3CP ID list information	-
response	Refer t	to the $^{\prime\prime}$ Error response format $^{\prime\prime}$	sheet for er	ror res	ponse			

Body uses JSON format.

Detailed infromation list

Detailed infinitionation is	L
URI	/v1/slices/[slice_type]/[slice_id]/cps/?format=detail-list

L2 CP

LZ OI	01												
message	code	body	type	requir	Allow nul	Allow empty	overview	remarks					
request	-	-	-	_	-	-		-					
	200	I2_cps	object[]	Υ	N		L2CP ID list information	-					
response	200	Getting information of CP on the contents of I2_cp object of information acquisition											
	Refer t	to the "Error response format"	sheet for en	ror res	ponse		•						

Body uses JSON format.

L3 CP

LU UI												
message	code	body	type	requir	Allow nul	Allow empty	overview	remarks				
request	-	_	-	_	-	-		-				
	200	I3_cps	object[]	Υ	N	Υ	L3CP ID list information	-				
response	200	Getting information of CP on the contents of I3_cp object of information acquisition										
	Refer	to the $^{\prime\prime}$ Error response format $^{\prime\prime}$	sheet for er	ror res	ponse							

Interface name	Creating / Deleting Static Route
Method	PATCH

URI parameter	type	overview	remarks
slice_type	string	Slice type	Allowed only "I3vpn"
slice_id	string	Slice ID	
cp_id	string	CP ID	

Optional parameters	type	required	overview	remarks
notification_address	string	Υ	Operation completion notification address	Refer to "Asynchronous request format" for specification
notification_port	string	Υ	Operation completion notification destination po	of optional parameters to URI

URI /v1/slices/{slice_type}/{slice_id}/cps/{cp_id}

message	code	bod	у		type	required	Allow null	Allow empty array	overview	remarks				
		(nar	nele	ess)	object∏	Υ	N	N		Static route creation and deletion can not be specified at the same time.				
		•	op		string	Υ	N		operation target CP	Adding static route: "add" Deleting static route: "remove"				
request	_		oath		string	Υ	N		Destination point indicating operation target CP	Creating static route:"/static_routes" is specified. Deleting static route:"/static_routes/"+[address type (ipv4 or ipv6)] + "_"+[destination address] + "_" + [prefix] + "_" + "_" + [NEXT HOP] (/static_routes/ipv4_10.0.0_24_100.1.1.100)				
		,	valu	е	object	N	Υ			It is necessary to specify for creating static route. But, when deleting static route, error is occurred.				
			s	tatic_route	object	Υ	Ν	Ν	static route inforomation	-				
								addr_type	string	Υ	N		IP address type	″ipv4″ ″ipv6″
				address	string	Υ	N		destination address	-				
I				prefix	int	Υ	N		prefix	-				
					next_hop	string	Υ	N		NEXT HOP	-			
rocponco	202	ope	ratio	on_id	string	Υ	N		ID for getting information on asynchronous opera-	_				
response	Refer to the "Error response format" sheet for error response					or respon	_							

Body uses JSON format.

Asynchronous response

The result of the asynchronous response is set by being set in "processing result information (status_code)" and "response body part (body)" of "000103 operation detail acquisition" IF.

message	code	body	type	required	Allow null	Allow empty array	overview	remarks	
	201	static_route_ids	string[]	Υ	N		Generated static route id list	when adding static route	
response	204	-	-	-	_			when deleting static route	
	Refer to the "Error response format" sheet for error response								

Interface name	Getting IF traffic information list
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-
fabric_type	string	fabric type	″spines″ : Spine ″leafs″ : Leaf
node_id	string	Slice ID	=

URI	/v1/	traffic/	clusters/	cluster	id)	/nodes/	node_id]/interfaces

message	code	body	type	required	Allow null	Allow empty array	overview	remarks		
request	-	-	-	-	-	-	-	-		
	200	if_traffics	object[]	N	Υ	Υ	List of CP traffic information	List information of IF traffic collected from the target device		
response	200	Information on the contents of the cp_traffic object for acquiring CP traffic information								
	Refer to	Refer to the "Error response format" sheet for error response								

Interface name	Getting IF traffic information
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	=
fabric_type	string	fabric type	"spines": Spine "leafs": Leaf
node_id	string	Slice ID	-
if_type	string	IF type	"physical-if": Physical IF "lag-if": LagIF "breakout-if": breakoutIF
if_id	string	IF ID	_

JRI /v1/traffic/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/[if_type]/[if_id]

message	code	body		type	required	Allow null	Allow empty array	overview	remarks	
response	-	-		-	-	-	-	-	-	
		if_tra	affic	object	Υ	N		Slice ID	Traffic information collected from the target device	
		f	abric_type	string	Υ	N		fabric type	"spines":Spine "leafs";Leaf	
		r	node_id	string	Υ	N		Device ID		
			raffic_value	object	Υ	N		Traffic information		
response	200		if_type	string	Υ	N		IF type	"physical-if":Physical IF "lag-if":Lag F "breakout-if":breakout F	
			if_id	string	Υ	N		IF ID	-	
			receive_rate	double	Υ	N		receive rate	A value obtained by converting the number of received packets into a traffic amount (Gbps)	
			send_rate	double	Υ	N		transmission rate	A value obtained by converting the number of transmitted packets into the traffic volume (Gbps)	
I	Refer to the "Error response format" sheet for error response									

Interface name	Getting CP traffic information list
Method	GET

URI parameter	type	overview	remarks
slice_type	string	Slice type	Fixed below "I3vpn":L3 slice
slice_id	string	Slice ID	-

URI	/v1/traffic/slices/	{slice_type}/	{slice_id	/cps
-----	---------------------	---------------	-----------	------

message	code	body	type	required	Allow null	Allow	overview	remarks		
request	-	-	-	-	_	-	_	-		
	200	cp_traffics	object[]	N	Υ	Υ	List of CP traffic information	-		
response	200	Information on the contents of the cp_traffic object for acquiring CP traffic information								
	Refer to the "Error response format" sheet for error response									

Interface name	Getting CP traffic information
Method	GET

URI parameter	type	overview	remarks
slice_type	string		Fixed below "I3vpn":L3 slice
slice_id	string	Slice ID	-
cp_id	string	CP ID	-

URI /v1/traffic/slices/slice type//slice id/cps//cp id/

request	code	body		type	required	Allow null	Allow empty array	overview	remarks						
response	-	-		-	-	-	-	List of CP traffic information	-						
		cp_t	raffic	object	Υ	N		Traffic information	-						
		5	slice_id	string	Υ	N		Slice ID	-						
		c	p_id	string	Υ	N		CP ID	-						
	200	t	raffic_value	object	Υ	N									
response	se								receive_rate	double	Υ	N		receive rate	A value obtained by converting the number of received packets into a traffic amount (Gbps)
								send_rate	double	Υ	N		transmission rate	A value obtained by converting the number of transmitted packets into the traffic volume (Gbps)	
	Refer to the "Error response format" sheet for error response														

Interface name	Getting Failure Information List
Method	GET

URI /v1/failures/failure_status

message	code	body		type	required	Allow null	Allow empty	overview	remark
request	-	-		-	-	-	-	-	-
request			1					Failure notification	
		physic	cal_unit	object	N	Υ		information(per physical unit)	-
		no	odes	object[]	N	Υ	Y	Node infromation list	Node failure notification
			cluster id	string	Υ	N		Cluster ID	-
			fabric type	string	Y	N		Node type(Leaf or Spine)	_
			node id	string	Ϋ́	N		Node ID	_
					i.				"up"
			failure_status	string	Υ	N		Failure status	"down"
		ifs		object[]	N	Υ	Y	IF information list	-
			cluster_id	string	Υ	N		Cluster ID	-
			fabric_type	string	Y	N		Node type(Leaf or Spine)	_
			node_id	string	Y	N		Node ID	-
			-	J					"physical-if":physical-IF
			if_type	string	Υ	N		IF type(see remark)	"lag-if": LAG IF
					1			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	"breakout-if" : breakoutIF
			if_id	string	Υ	N		IF ID	-
					i.				"up"
			failure_status	string	Υ	N		Failure status	"down"
							$\overline{}$	Failure notification	40111
		cluste	er_unit	object	N	Υ		information(per cluster unit)	-
		cli	usters	object[]	Υ	N	· ·	Cluster information	_
			cluster id	string	Ϋ́	N	_	Cluster ID	-
			ciustei_iu	30 IIIg	-	IN	$\overline{}$	Cluster ID	"edge_point" : edge-point
			type	string	Υ	N		type(see remark)	"cluster link-if": inter-cluster IF
			сурс	30 mg	l'			type(see remark)	"internal":internal cluster
									Specified "type"'s ID
			id	string	N	Υ		ID(see remark)	(i.e. if type is edge-point, edge-point
			lu lu	Suring	IN	'		ID(see remark)	is obtained.)
	200						- 	4	"up"
response	200		failure etatue	atuin a	Υ	N		Failure status	″down″
			failure_status	string	ī	N		Fallure Status	"warn"
		- 						Failure notification	warn
		slice_i	unit	object	×	0		information(per slice unit)	-
		ali	ces	object[]	0	×	0	Slice information	
		SII	ces	object[]			\sim		"l2vpn" : L2Slice
			slice_type	string	0	×		Slice type	"I3vpn": L3Slice
			slice id	- Andrews	0	×		Cli ID	lavpri . Laslice
				string string[]	0	×	0	Slice ID CP ID list	-
			cp_ids	string[]		^	\sim	CP ID list	- ""
			failure_status	string	0	×		Failure status	"up"
							_		"down" Reachability status list between CP <
			reachable_statuses	object[]	×	0	0	Reachability status list	
					_	×	_	OD ID	> CP and CP <-> inter-cluster link IF
			cp_id	string	0	×		CP ID	One CP ID
			opposite_type	string	0	×		Opposite type	"cp": CP
			51						"cluster_link-if":Inter-cluster Link
			opposite id	string	0	×		The Opposite ID	ID of the type specified by
					_				"opposite_type"
			reachable_status	string	0	×		Reachability status	"reachable" : Reachable
					_				"unreachable" : Unreachable
		clı	cluster_link	object	×	0		Inter-cluster link failure	Only FC
				02,000			$\overline{}$	information	-
			reachable_statuses	object[]	0	×	0	Reachability status list	Reachability status list between inter-
							Ŭ.	·	cluster link IF <-> inter-cluster link II
			cluster_link_if_id	string	0	×		Inter-cluster link ID	_
			opposite_cluster_link_if_id	string	0	×		Opposite inter-cluster link ID	_
			reachable status	etule e	0	×		Reachability status	"reachable":Reachable
	L		reacriable_status	string		L^	$\overline{}$	reactiability status	"unreachable" : Unreachable
	Defeate the "	Eurou voo	ponse format" sheet for error response						