# Fabric Controller API List

# Version 1.0

October. 2017

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Response code list returned from MSF host system 400, 404 and 409 indicate the response codes caused by the client, and 500 indicates the response code caused by the server.

Class	Door	onse code	Reque	st ope	ration	type	Overview	Other codes to include in the response code
Glass	Resp	orise code	POST	GET	PUT	DELETE	Overview	Other codes to include in the response code
	200	OK	Υ	Υ	Υ		Resource acquisition or update, request processing by POST worked as expected.	-
Normal response	201	Created	Υ				Resource creating worked as expected.	-
Normanesponse	202	Accepted	Υ		Υ		Asynchronous processing was receieved.	_
	204	No Contents				Υ	Resource was deleted.	_
Abnormal response		Bad Request	Υ	Υ	Υ	Y	The data format is incorrect	401 Unauthorized 402 Payment Required 403 Forbidden 405 Method Not Allowed 406 Not Acceptable 408 Request Timeout 412 Precondition Failed 413 Request Entity Too Large 414 Request-URI Too Large 415 Unsupported Media Type
		Not Found	Υ	Υ	Υ	Υ	Target resource does not exist. (Or, operating for target resource is not permitted.)	-
	409	Conflict	Υ		Υ	Υ	There is already desired resource, or the operation target resource is locked	_
	500	Internal Server Error	Υ	Υ	Υ	Υ	Processing can not be continued due to server origin. (There are rare.)	501 Not Implemented 503 Service Unavailable

#### Error response format

message	code	body	type	required	overview	remarks
response	*1	error_code	string	N	This code represents the value that represents the details of	Response format see below. Error code definition is implemented in another document(ErrorCodeList.pdf).
		error_message	string	N	Failure cause (exception message)	-

Body uses JSON format.

The error code format is shown below.

The error code is composed of "classification code" and "Detailed code".

First two digits of code indicate classification code, and second four digits of code indicate detailed code, respectively.

(For example: 012345, 01 is the classification code, 2345 is the detailed code)

#### 1. Object definition

A group of multiple elements is defined as "Object".

Definition of chiled element composing of "Object" is indented.

#### [Example]

body		type	required	
param1		object	Υ	
param	I <b>-</b> 1	string	Υ	
param	1-2	object	Υ	
para	am1-2-1	string	Υ	
para	am1-2-2	string	Υ	
param	1-3	string	Υ	
param2		object	Υ	
param2	2-1	string	Υ	
param2	2-2	string	Υ	

Child elements of param1 is corresponding to param 1 - 1, param 1 - 2 and param 1 - 3, respectively.

For param 1 - 2, there are two additional child elements, which are param 1 - 2 - 1 and param 1 - 2 - 2.

The causal relation of child elements affects only one indent.

For example, there is no direct relationship between param1 and param1-2-1.

2. Required parameter

If "Y" is specified in column of "required", it has to set key and non-Null value to corresponding parameter.

If "N" is specified, parameter can be set as follows, and either format is allowed.

- 1. Do not describe the parameter key.
- 2. Write the parameter key and set "null"

bo	ody	type	required
pa	aram1	object	Υ
	param1-1	string	Υ
	param1-2	string	N
рa	aram2	object	N
	param2-1	string	Υ
	param2-2	string	Υ

```
[JSON example: parameter keys are not described.]
{
    "param1":{
        "param1-1": "aaaaa"
    }
}
```

```
[JSON example: parameter keys are written, but value is set "null" {
    "param1": {
        "param1-1": "aaaaa",
        "param1-2": null
    },
    "param2": null
```

#### 3. List

Elements that set multiple values for one key are expressed as an array.

An "empty array" which does not have any element is handled as one piece of information, distinguished from the abbreviated null

- → That is, a list in which "Y" is specified in the "required" column is not null if there is no setting element, and an empty string is specified
- → How to handle empty arrays obeys the requirements of each interface (see annotations written in remarks of each element)
- In the case where an element is described in an array, the requirement of "essential" described in the child element is valid (ineffective if it is an empty array)

body	type	required
param1	object[]	Υ
param1-1	string	Υ
param1-2	string	N
param2	object[]	N
param2-1	string	Υ
param2-2	string	Υ

```
【JSON notation example: no data in param1】
{
    "param1":[],
    "param2": null
```

There is an interface which allows empty array and performs processing normally without data.

There is also an interface that judges that it is incompatible when matching with related data in internal processing and returns error of set value error

#### 4. Empty string

For string type element, an empty string is set for required parameter which has no data. (Do not be set "null".)

→ How to handle empty strings follows the requirements of each interface (refer to annotations written in remarks of each element)

body	type	required
param1	string	Υ
param2	string	N

```
[Unacceptable JSON example: "null" is set to param1]
{
    "param1" : null,
    "param2" : null
```

#### NorthBound REST Interface

	No.		Identification ID	Method	URI	URI example	
Class	Group	Interface (API) description	Identification ID	Wethod	URI	URI example	
	1 D	2 Getting list of operational state	000102	GET	/v1/operations	/v1/operations	
0 Common	1 Processing request	3 Getting infromation of detailed operation state	000103	GET	/v1/operations/[operation id]	/v1/operations/1234567890123	
	2 Status confirmation	1 Status confirmation	000201	GET	/v1/MSFcontroller/status	/v1/MSFcontroller/status	
		1 Registering equipment information	010101	POST	/v1/clusters/[cluster_id]/equipment-types	/v1/clusters/1/equipment-types	
		2 Getting equipment list in switch cluster	010102	GET	/v1/clusters/[cluster_id]/equipment-types	/v1/clusters/1/equipment-types	
	1 Equipment-type information mana	3 Getting equipment information	010103	GET	/v1/clusters/[cluster_id]/equipment-types/[equipment_type_id]	/v1/clusters/1/equipment-types/10	
		4 Deleting equipment information	010104	DELETE	/v1/clusters/[cluster_id]/equipment-types/[equipment_type_id]	/v1/clusters/1/equipment-types/10	
	2 Switch-cluster information manag	1 Getting list of switch-clusters	010201	GET	/v1/clusters	/v1/clusters	
	2 Switch-cluster information manag	2 Getting information of switch-clusters	010202	GET	/v1/clusters/{cluster_id}	/v1/clusters/1	
	3 Node information	1 Getting list of nodes	010301	GET	/v1/clusters/{cluster_id}/nodes	/v1/clusters/1/nodes	
		1 Adding Leaf-node	010401	POST	/v1/clusters/[cluster_id]/nodes/leafs	/v1/clusters/1/nodes/leafs	
	4 Node management(Leaf)	2 Getting list of Leaf-nodes	010402	GET	/v1/clusters/{cluster_id}/nodes/leafs	/v1/clusters/1/nodes/leafs	
	4 Node management(Lear)	3 Getting information of Leaf-node	010403	GET	/v1/clusters/{cluster_id}/nodes/leafs/{node_id}	/v1/clusters/1/nodes/leafs/1	
		4 Deleting Leaf-node	010404	DELETE	/v1/clusters/[cluster_id]/nodes/leafs/[node_id]	/v1/clusters/1/nodes/leafs/1	
		1 Adding Spine-node	010501	POST	/v1/clusters/[cluster_id]/nodes/spines	/v1/clusters/1/nodes/spines	
	5 Node management(Spine)	2 Getting list of Spine-nodes	010502	GET	/v1/clusters/{cluster_id}/nodes/spines	/v1/clusters/1/nodes/spines	
	3 Node management(Spine)	3 Getting information of Spine-node	010503	GET	/v1/clusters/[cluster_id]/nodes/spines/[node_id]	/v1/clusters/1/nodes/spines/1	
Cluster		4 Deletting Spine-node	010504	DELETE	/v1/clusters/[cluster_id]/nodes/spines/[node_id]	/v1/clusters/1/nodes/spines/1	
1 management	6 Node management	1 Getting list of RR-node	010601	GET	/v1/clusters/[cluster_id]/nodes/rrs	/v1/clusters/1/nodes/rrs	
management	(BGP Route Reflector)	2 Getting infromation of RR-node	010602	GET	/v1/clusters/[cluster_id]/nodes/rrs/[node_id]	/v1/clusters/1/nodes/rrs/1	
	7 Interface information	1 Getting list of interfaces	010701	GET	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces	/v1/clusters/1/nodes/leafs/1/interfaces	
	. Interface management	1 Getting list of physical interfaces	010801	GET	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/physical-ifs	
	(Physical interface)	2 Getting information of physical interface	010802	GET	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-ifs/[if_id]	/v1/clusters/1/nodes/leafs/1/interfaces/physical-ifs/1	
		3 Updating information of physical interface	010803	PUT	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/physical-ifs/[if_id]	/v1/clusters/1/nodes/leafs/1/interfaces/physical-ifs/1	
	g Interface management	1 Getting list of internal-link interfaces	010901	GET	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/internal-link-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/internal-link-ifs	
	(Internal-link interface)	2 Getting information of internal-link interface	010902	GET	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/internal-link-ifs/[internal_link_if_ic	1 /v1/clusters/1/nodes/leafs/1/interfaces/internal-link-ifs/1	
		1 Creating Link-aggregation interface	011001	POST	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/lag-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/lag-ifs	
	10 Interface management	2 Getting list of Link-aggregation interfaces	011002	GET	/v1/clusters/[cluster_id]/nodes/[fabric_type]/[node_id]/interfaces/lag-ifs	/v1/clusters/1/nodes/leafs/1/interfaces/lag-ifs	
	(Link aggregation interface)	3 Getting information of Link-aggregation interface	011003	GET	/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 information of Link-aggregation interface	011005	DELETE	/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 edge-point	011101	POST	/v1/clusters/[cluster_id]/points/edge-points	/v1/clusters/1/points/edge-points	
	11 Edge point management	2 Getting list of edge-points	011102	GET	/v1/clusters/[cluster_id]/points/edge-points	/v1/clusters/1/points/edge-points	
		3 Getting infromation of edge-point	011103	GET	/v1/clusters/[cluster_id]/points/edge-points/[edge_point_id]	/v1/clusters/1/points/edge-points/1	
		4 Deleting edge-point	011104	DELETE	/v1/clusters/{cluster_id}/points/edge-points/{edge_point_id}	/v1/clusters/1/points/edge-points/1	
		1 Creating Slice	020101	POST	/v1/slices/[slice_type]	/v1/slices/l2vpn	
				ļ:		/v1/slices/l3vpn	
		2 Updating Slice	020102	PUT	/v1/slices/[slice_type]/[slice_id]	/v1/slices/l2vpn/1	
						/v1/slices/l3vpn/100	
	1 Slice	3 Deleting Slice	020103	DELETE	/v1/slices/{slice_type}/{slice_id}	/v1/slices/l2vpn/1	
						/v1/slices/l3vpn/100	
		4 Getting information of Slice	020104	GET	/v1/slices/[slice_type]/[slice_id]	/v1/slices/l2vpn/1	
						/v1/slices/l3vpn/100	
		5 Getting list of Slices	020105	GET	/v1/slices/[slice_type]	/v1/slices/l2vpn	
2 Slice Management						/v1/slices/I3vpn	
I I = -		1 Creating CP	020201	POST	/v1/slices/[slice_type]/[slice_id]/cps	/v1/slices/l2vpn/1/cps	
		<u> </u>				/v1/slices/l3vpn/100/cps	
1		2 Updating CP	020202	PUT	/v1/slices/{slice_type}/{slice_id}/cps/{cp_id}	/v1/slices/l2vpn/1/cps/1	
		· -	1	<u> </u>		/v1/slices/l3vpn/100/cps/10	
	2 CP (Connection Port)	3 Deleting CP	020203	DELETE	/v1/slices/{slice_type}/{slice_id}/cps/{cp_id}	/v1/slices/l2vpn/1/cps/1	
<b>I</b>			<del> </del>	<del>                                     </del>		/v1/slices/l3vpn/100/cps/10	
		4 Getting information of CP	020204	GET	/v1/slices/{slice_type}/{slice_id}/cps/{cp_id}	/v1/slices/l2vpn/1/cps/1	
1 1			<del> </del>	<del>                                     </del>		/v1/slices/l3vpn/100/cps/10 /v1/slices/l2vpn/1/cps	
1 1		5 Getting lists of CP	020205	GET	/v1/slices/{slice_type}/{slice_id}/cps/	/v1/slices/l2vpn/1/cps /v1/slices/l3vpn/100/cps	
	l I		1	i	L	/ V1/ Slides/ lovpfi/ TUU/ Cps	

Interface name	Getting list of operational state
Method	GET

URI option	type	required	overview	remarks
format	string	N	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]

-	Z II O CZ	
	URI	/v1/operations
	ON	/v1/operations?format=list

message	code	body	type	required	overview	remarks
request	-	-	-	N	_	-
	200	operation_ids	string[]	Υ	Operation ID	-
response	Refer	to the "Error response forma	t" sheet for $\epsilon$	error resp	onse	

Body uses JSON format.

## 【detailed list】

	URI	/v1/operations?format=detail-list
-		

message	code	body	type	required	overview	remarks
request	_	_	-	-	-	-
		operations	object[]	Υ	-	-
		operation_id	string	Υ	Operation ID	-
		occurred_time	string	Υ	Occurrence time	format is "YYYYMMDD_hhmmss"
		last_update_time	string	Υ	Last update time	When the status is in the completed state, the completion time is stored. format is "YYYYMMDD_hhmmss"
		status	string	Y	status	"unexecuted": Unexecuted "executing": Running "completed": completed "failed": failed "canceled": System dependent execution cancellation
response	200	sub_status	string	N	sub_status	As required, each function stores the detailed state of "executing".
		request	object	Υ	Request information	-
		uri	string	Υ	Request URI	-
		method	string	Y	Request method	"POST" "PUT" "DELETE"  X Only operations that can be asynchronous can be specified
		response	object	N	Response information	Required when status is "completed" or "failed"
		status_code	uint	Y	Process result information	Set the value with the same policy as REST response code  Example: 200 = OK
	Refer	to the "Error response fo	rmat" sheet for	error resp	onse	

Interface name	Getting infromation of detailed operation state
Method	GET

URI parameter	type	overview	remarks
operation_id	string	Operation ID	-

URI /v1/operations/{operation\_id}

message	code	bo	dy	type	required	overview	remarks
request	-	-		-	-	-	-
		ор	eration_id	string	Υ	Operation ID	-
		ОС	curred_time	string	Υ	Occurrence time	format is "YYYYMMDD_hhmmss"
		las	st_update_time	string	Υ	Last update time	When the status is in the completed state, the completion time is stored.  format is "YYYYMMDD hhmmss"  unexecuteuonexecuteu
		sta	atus	string	Y	status	"executing": Running "completed": completed "failed": failed "canceled": System dependent execution
		su	b_status	string	N	sub_status	As required, each function stores the detailed state of "executing".
		re	quest	object	Υ	Request information	-
			uri	string	Υ	Request URI	-
	200		method	string	Y	Request method	"POST" "PUT" "DELETE" " Only operations that can be asynchronous can be specified or summer summer or request body
response	200		body	string	Υ	Request body part	information  For double quotation marked from the original, it is
		re	sponse	object	N	Response information	Required when status is "completed" or "failed"
			status_code	uint	Υ	Process result information	Set the value with the same policy as REST respons code Example: 200 = OK
			body	string	Y	Response body part	Character string information of response body part created for each processing.  ** Basically it assumes the json format, but for double quotes, it is assumed to be replaced by *** 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 is also stored here.

Interface name	Status confirmation
Method	GET

JRI	/v1/MSFcontroller/status
-----	--------------------------

message	code	body	type	required	overview	remarks			
request	-	_	_	_	_	-			
response	200	service_status	string	Υ	Service activation state	"start-up in progress": Preparing to launch "running": running "shutdown in progress": Preparing to stop "system switching": Switching system			
		blockade_status	string	Υ	Maintenance blocked state	"blockade" : Blocked "none" : Not blocking			
	Refer to the "Error response format" sheet for error response								

Interface name	Registering equipment information
Method	POST

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	=

#### URI /v1/clusters/{cluster\_id}/equipment-types

message	code	bo	dy	type	required	overview	remarks
		eq	uipment_type	object	Υ	Model information	-
			platform	string	Υ	platform	=
			os	string	Υ	OS	=
			firmware	string	Υ	Firmware version	-
			capability	object	Υ	Capability information	-
			l2vpn	boolean	Υ	L2VPN compatibility	-
			l3vpn	boolean	Υ	Possibility to comply with L3VPN	-
			dhcp	object	Υ	DHCP setting information	-
			config_template	string	Υ	Dhcpd.conf template file path	-
			initial_config	string	Υ	Device initial setting setting file path	_
			snmp	object	Υ	SNMP information	_
			if_name_oid	string	Υ	IF name acquisition MIB information	Specify OID
request	_		snmptrap_if_name_oid	string	N	Get IF name in SNMPTrap MIB information	Specify OID
request			max_repetitions	int	Υ	Maximum number of information retrieved with one GETBULK	-
			boot_complete_msg	string	Υ	Startup completion judgment message	-
			boot_error_msgs	string[]	N	Start failure determination message list	-
			if_definitions	object	Υ	IF information definition	_
			ports	object[]	Υ	Port information	_
			speed	string	Υ	Port speed	_
			port_prefix	string	Υ	Port name prefix	-
			lag_prefix	string	Υ	Lag IF name prefix	-
			unit_connector	string	Υ	Unit IF connector	-
			slots	object[]	Υ	Slot information	-
			if_id	string	Υ	Physical port ID	_
		1	if_slot	string	Υ	IF slot name	_
		L	speed_capabilities	string[]	Υ	Port speed type correspondence list	-
response	201		uipment_type_id	string	Υ	Model ID	-
response	Refer	to t	he "Error response format" sheet for	error respons	e		•

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

URI parameter	type		overview	remarks
cluster_id	string		Switch cluster ID	-
Optional parameters	type	required	overview	remarks
format	string	N	Get information type	"list": list "detail-list": Detailed list for sliced users or detailed list for system administrator

_	LIST	
ı	URI	/v1/clusters/{cluster_id}/equipment-types
- 1	UNI	/v1/clusters/[cluster_id]/equipment-types?format=list

message	code	body	type	required	overview	remarks
request	_	-	-	N	-	-
roononoo	200	equipment_type_ids	string[]	Υ	Model ID list	-
response	Refer to the	"Error response format" sheet for error response	nse			

Body uses JSON format.

# [Detailed list]

ON		/ V1/ Clusters/ (Cluster_luj/ equipment types:10	V1/ clusters/ (cluster_td)/ equipment_types: tormat=uetair_list							
message	code	body	type	required	overview	remarks				
request	_	-	_	-	-	-				
	200	equipment_types	object[]	Υ	Detailed model list	-				
response		Information under equipment_type of "01	Information under equipment_type of "010103 Getting equipment inform"							
	Refer to the	"Frror response format" sheet for error response	onse							

	Getting equipment information
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	_
equipment_type_id	string	Model ID	_

# URI /v1/clusters/[cluster\_id]/equipment-types/[equipment\_type\_id]

message	code	body				type	required	overview	remarks
request	-	_				-	-	-	-
		equipment_type			object	Υ	Model information	-	
			equipment_type_id		string	Υ	Model ID	-	
						string	Υ	platform	_
			os			string	Υ	OS	_
			firmwar	e		string	Υ	Firmware version	_
			capabili	ty		object	Υ	Capability information	_
				l2vpn		boolean	Υ	L2VPN compatibility	_
				l3vpn		boolean	Υ	Possibility to comply with L3VPN	_
			dhcp			object	Υ	DHCP setting information	_
				config_t		string	Υ	Dhcpd.conf template file path	_
				initial_config		string	Υ	Device initial setting setting file path	_
			snmp			object	Υ	SNMP information	_
				if_name_	_oid	string	Υ	IF name acquisition MIB information	_
response	200			snmptrap_if_name_oid		string	N	Get IF name in SNMPTrap MIB information	_
response				max_rep		int	Υ	Maximum number of information retrieved	_
			boot_complete_msg		string	Υ	Startup completion judgment message -		
				oot_error_msgs		string[]	N	Start failure determination message list	-
			if_defini	tions		object	Υ	IF information definition	-
				ports		object[]	Υ	Port information	-
					speed	string	Υ	Port speed	-
					port_prefix	string	Υ	Port name prefix	_
				lag_pref		string	Υ	Lag IF name prefix	_
				unit_cor	nector	string	Υ	Unit IF connector	_
			slots			object[]	Υ	Slot information	_
				if_id		string	Υ	Physical port ID	-
				if_slot		string	Υ	IF slot name	-
					apabilities	string[]	Υ	Port speed type correspondence list	-
	Refer	to the "E	rror res	sponse fo	ormat" sheet for e	rror response			

	Deleting equipment information
Method	DELETE

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	_
equipment_type_id	string	Model ID	_

URI	/v1/clusters/{cluster	_id}/equipment-types/{equipment_type_id}

message	code	body	type	required	overview	remarks
request	_	-	_	N		_
rooponoo	204	1	-	N	1	_
response	Refer t	o the "Error response format" sheet	for erro	or respons	se	

Interface name	Getting list of switch-clusters
Method	GET

Optional parameters	type	required	overview	remarks
format	string	N		"list":list "detail-list":Detailed list for sliced users or detailed list for system administrator When omitted, same as "list" specification.
user-type	string	N		"operator": Detailed list for system administrator XDetailed list for sliced users when omitted

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

message	code	body	type	required	overview	remarks
request	-	_	-	N	-	-
response	200	sw_cluster_ids	string[]	Υ	Switch cluster ID list information	-
response	Refer to the "	Error response format $^{\prime\prime}$ sheet for err	or response			

Body uses JSON format.

#### [Detailed list for sliced users]

Detailed life for eliced deere						
HIDI	/、1/~	:lusters?format=detail-list				
IURI						

message	code	body	type	required	overview	remarks		
request	-	-	-	N	-	-		
	200	sw_clusters	object[]	Υ	Switch cluster list information	-		
response	200	"010202_Getting information of" [Detailed information for sliced user] Information on the contents of sw_cluster object						
I	Refer to the "	rror response format" sheet for error response						

Body uses JSON format.

# [Detailed list for system administrator]

URI	/v1/clusters?format=detail-list&user-type=operator

message	code	body	type	required	overview	remarks		
request	_	-	_	N	-	-		
	200	sw_clusters	object[]	Υ	Switch cluster list information	-		
response	200	"010202_Getting information of" [Detailed list for system administrator] information on the contents of sw_cluster object						
	Refer to the "Error response format" sheet for error response							

	Getting information of switch-clusters
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-

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

[Detailed list for sliced users]
URI /v1/clusters/{cluster\_id}

message	code	body		type	required	overview	remarks
request	-	-	-		N	-	-
		sw_cluster		object	Υ	Switch cluster information	-
		sw_cluster_	id	string	Υ	Switch cluster ID	
		edge_points	5	object	Υ	Related edge-point ID list	
		I2_edge_p	points	string[]	Υ	Related L2 edge-point ID list	-
		I3_edge_r	points	string[]	Υ	Related L3 edge-point ID list	
		uni_support	protocols	object	Υ	Support UNI connection protocol informat	
	200	L2		boolean	Υ	L2 correspondence propriety	Specify true only when there is an L2-enabled Leaf in the cluster specify true only when L3 corresponding Lear exists in the
response		L3		boolean	Υ		cluster.
		L3_proto		string[]	N	Protocol list for L3	Required only if L3 is true. If unsupported, return an empty list. The protocol described is as follows "bgp", "ospf", "static", "vrrp"
	Refer to	the "Error resp	onse format" sheet for error	response			

Body uses JSON format.

[Detailed list for system administrator]

URI | /v1/clusters/{cluster\_id}?user-type=operator

message	code	body	type	required	overview	remarks
request	-	-	-	N	-	-
		sw_cluster	object	Υ	Switch cluster information	-
		sw_cluster_id	string	Υ	Switch cluster ID	-
		max_leaf_num	int	Υ	Maximum Leaf number	-
		max_spine_num	int	Υ	Max Spine number	-
		ec_control_address	string	Υ	EC connection address	-
		ec_control_port	int	Υ	EC connection port	-
		as_num	int	Υ	AS number	-
		edge_points	object	Υ	Related edge-point information	-
		I2_edge_points	string[]	Υ	Related L2 edge-point ID list	-
		I3_edge_points	string[]	Υ	Related L3 edge-point ID list	-
		uni_support_protocols	object	Υ	Support UNI connection protocol informat	
	200	L2	boolean	Υ	L2 correspondence propriety	Specify true only when there is an L2-enabled Leaf in the cluster specify true only when L3 corresponding Lear exists in the
response		L3	boolean	Υ	Possibility to comply with L3	Specify true only when L3 corresponding Lear exists in the cluster.
		L3_protocols	string[]	N	Protocol list for L3	Required only if L3 is true. If unsupported, return an empty list. The protocol described is as follows "bgp", "ospf", "static", "vrrp"
		address_definitions	object	Υ	Cluster specific address definition information	-
		interface_start_address	string	Υ	Interface source IP address	_
		loopback_start_address	string	Υ	Loop back source IP address	_
		management_start_address	string	Υ	Management source IP address	_
		management_address_prefix the "Error response format" sheet for	int	Υ	Prefix for management address	-

Interface name	Getting list of nodes
Method	GET

URI parameter	type	overview	remarks
cluster id	string	Switch cluster ID	=

Optional parameters	type	required	overview	remarks
format	string	N		"list":list "detail-list":Detailed list for sliced users or detailed list for system administrator When poitted same as "list" specification

ı	URI	/v1/clusters/[cluster_id]/nodes
ı	JKI	/v1/clusters/[cluster_id]/nodes?format=list

message	code	body	type	required	overview	remarks
request	-	-	_	N	-	_
		leaf_node_ids	string[]	Υ	Leaf device ID list information for each SW cluster	_
	200	spine_node_ids	string[]	Υ	Spine device ID list information for each SW cluster	-
response		rr_node_ids	string[]	Υ	RR device ID list information for each SW cluster	_
	Refer	to the "Error response format" sheet	for error respon	ise		

Body uses JSON format.

[Detailed list]

Detailed list	
URI	/v1/clusters/[cluster id]/nodes?format=detail-list

message	code	body	type	required	overview	remarks		
request	-	-	_	N	-	_		
			object[]		Leaf device ID list information for each SW cluster	_		
		010403_Leaf Information on the c	ontents of the le	af object	for acquiring information			
	200	spines	object[]	Υ	Spine device ID list information for each SW cluster	_		
response	200	010503_Spine Information on the	contents of the	spine obje	ect for acquiring information			
		rrs	object[]	Υ	RR device ID list information for each SW cluster	_		
		010602_RR Information on the co	ntents of rr obje	ct for acc	juiring information			
	Refer to the "Error response format" sheet for error response							

Interface name	Adding Leaf-node
Method	POST

URI parameter	type	overview	remarks
cluster id	string	Switch cluster ID	-

# URI /v1/clusters/{cluster\_id}/nodes/leafs

message	code	body		type	required	overview	remarks
		node_id		string	Υ	Device ID	To automatically calculate the loopback address of the device, specify the management sequence number with numeric character string
		equipmen	t_type_id	string	Υ	Model ID	-
		host_nam	e	string	Υ	hostname	-
		mac_addr		string	Υ	MAC address	Specified in the format of XX: XX: XX: XX: XX: X
		username		string	Υ	Login user name	_
		password		string	Υ	Login password	_
		provision	ing	boolean	Υ	Device setting necessity flag	True: Built-in device not set False: Embed setting device
request	-	vpn type		string	Υ	L2 / L 3 VPN type	One of "I2" and "I3"
·		plane		int	Υ	Belonging side	1: "A side" 2: "B side"
		snmp_con	nmunity	string	Υ	SNMP community name	-
		ntp_serve	r_address	string	Υ	NTP server address	-
		internal_li	nk	object	Υ	Internal link information	_
		physic	al_links	object[]	Υ	Physical link information list	_
		loc	al_if_id	string	Υ	Physical IF ID	_
		spe	eed	string	Υ	Port speed type	-
		ren	note_spine_node_id	string	Υ	Opposite Spine device ID	-
		ren	note_if_id	string	Υ	Facing Spine Physical IF ID	-
	201	node_id	_	string	Υ	Device ID of additional target Leaf	_
response	Refer	to the "En	ror response format" shee	t for error respons	se	·	

Interface name	Getting list of Leaf-nodes
Method	GET

URI parameter	type	overview	remarks
cluster id	string	Switch cluster ID	=

Optional parameters	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 pointted same as "list" specification

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

message	code	body	type	required	overview	remarks
request	-	-	_	-	-	_
	200	leaf_node_ids	string[]	0	Leaf device ID list information for each SW cluster	-
response	Refer t	to the "Error response format" sheet	for error respon	nse		

Body uses JSON format.

#### [Detailed list]

	JRI	/v1/clusters/{cluster_id}/nodes/leafs?format=detail-list
-		

message	code	body	type	required	overview	remarks			
request	-	-	_	-	-	_			
	200	leafs	object[]	0	SWクラスタ毎のLeaf一覧情報	_			
response	200	010403_Leaf Information on the c	ontents of the le	eaf object	for acquiring information				
	Refer to the "Error response format" sheet for error response								

	Getting information of Leaf-node
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-
node_id	string	Device ID	-

URI /v1/clusters/{cluster\_id}/nodes/leafs/{node\_id}

nessage	code	body	type	required	overview	remarks		
equest	-	_	-	_	-	-		
		leaf	object	Υ	Leaf Information	_		
		node_id	string	Υ	Device ID	_		
		equipment_type_id	string	Υ	Model type ID	-		
		host_name	string	Υ	hostname	-		
		mac_addr	string	Υ	MAC address	-		
		username	string	Υ	Login user name	_		
		provisioning	boolean	Υ	Device setting necessity flag	True: Additional equipment due to device addition False: additional device with built-in device "		
		vpn_type	string	Υ	L2 / L 3 VPN type	One of "I2" and "I3"		
		plane	int	Υ	Belonging side	-		
		snmp_community	string	Υ	SNMP community name	-		
		ntp_server_address	string	Υ	NTP server address	-		
		physical_ifs	object[]	Υ	Physical IF list information	_		
		physical_if_id	string	Υ	Physical IF ID	_		
		opposite_if	object	N	Counter IF information	Designated only when facing IF exists		
		fabric_type	string	Υ	Device type	Spine: Spine		
		node_id	string	Υ	Device ID	-		
		physical_if_id	string	Υ	Physical IF ID of the opposite device	-		
		speed	string	N	IF speed	Specify null if speed is not set.		
	200	internal_link_ifs	object[]	Υ	Internal link IF list information	-		
esponse		010902_ internal link inf	ormation on IF in	formation	n acquisition internal_link_if information on con-	ents of object		
		lag_ifs	object[]	Υ	LagIF list information	_		
		lag_if_id	string	Υ	LagIF ID	_		
		internal_options	object	N	Information for LagIF for internal link	Set only for LagIF for internal links		
		ipv4_address	string	Υ	IPv4 address	_		
		opposite_if	object	Υ	Counter IF information	_		
		fabric_type	string	Υ	Counter device type	"spine": Spine		
			node_id	string	Υ	Counter device ID	-	
					lag_if_id	string	Υ	Opposing LagIF ID
		minimum_links	int	Υ	Minimum number of links	_		
		speed	string	Υ	IF speed	_		
		physical_if_ids	string[]	Υ	Physical IF ID list constituting LAG	_		
		router_id	string	Υ	Router ID	_		
		management_if_address	string	Υ	Management IF address	_		
		provisioning_status	string	Υ	Device expansion state	"stopped":not activated "unset":Activate (not set) "setting":Device setting in progress "boot failed":Expansion failed "boot complete":completion of installation		
		registered rr node ids	string[]	Υ	Device ID list information of registered RR	-		
	D . C	to the "Error response format	" -l + f		Device 10 list information of registered filt	+		

Interface name	Deleting Leaf-node
Method	DELETE

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	_
node_id	string	Device ID	_

#### /v1/clusters/{cluster\_id}/nodes/leafs/{node\_id}

message	code	body	type	required	overview	remarks
request	-	-	-	-	-	_
	202	operation_id	string	Υ	ID for acquiring information of asynchronous operation	_
response	Refer	to the "Error response format" sh	neet for o	error respon	se	

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

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

	Adding Spine-node
Method	POST

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	=

URI /v1/clusters/{cluster\_id}/nodes/spines

message	code	body	•	type	required	overview	remarks
		node_id		string	Y	Device ID	To automatically calculate the loopback address of the device, specify the management sequence number with numeric character string
		equip	oment_type_id	string	Υ	Model ID	_
		host	name	string	Υ	hostname	-
		mac_	addr	string	Υ	MAC address	Specified in the format of XX: XX: XX: XX: XX
		username		string	Υ	Login user name	-
		pass	word	string	Υ	Login password	_
request	-	provisioning		boolean	Υ	Device setting necessity flag	true:Built-in device not set false:Embed setting device
		snmp_community		string	Υ	SNMP community name	-
		ntp_server_address		string	Υ	NTP server address	_
		internal_link		object	Υ	Internal link information	-
		р	hysical_links	object[]	Υ	Physical link information list	_
			local_if_id	string	Υ	Physical IF ID	-
			speed	string	Υ	Port speed type	-
			remote_leaf_node_id	string	Υ	Opposite Leaf device ID	_
			remote_if_id	string	Υ	Opposite Leaf Physical IF ID	-
racpanca	201	node		string		Device ID of additional target Spine	_
response	Refer	to the	"Error response format" sheet for	error response	9	•	_

	Getting list of Spine-nodes
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	=

Optional parameters	type	required	overview	remarks
format	string	N	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/spines
UKI	/v1/clusters/[cluster_id]/nodes/spines?format=list

message	code	body	type	required	overview	remarks		
request	-	_	-	-	-	_		
********	200	spine_node_ids	string[]	Υ	Spine device ID list information for each SW cluster	_		
response	Refer to the "Error response format" sheet for error response							

Body uses JSON format.

## 【詳細一覧】

URI	/v1/clusters/[cluster_id]/nodes/spines?format=detail-list

message	code	body	type	required	overview	remarks		
request	-	-	-	-	-	_		
	200	spines	object[]	Υ	Spine list information for each SW cluster	_		
response								
	Refer to the "Error response format" sheet for error response							

	Getting information of Spine-node
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-
node_id	string	Device ID	-

# URI /v1/clusters/[cluster\_id]/nodes/spines/[node\_id]

message	code	body	,		type	required	loverview	remarks
request	-	_			-	-	_	_
roquost		spine	2		obiect	Υ	Spine Information	=
			node id		string	Y	Device ID	=
				nt type id	string	Y	Model ID	-
		I -	nost nam	- /1 -	string	Y	hostname	-
			mac add		string	Y	MAC address	_
		_	username		string	Y	Login user name	-
			provision		boolean	Y	Device setting necessity flag	true: Additional equipment due to device addition false: additional device with built-in device
		5	snmp_co	mmunity	string	Υ	SNMP community name	-
		r	ntp_serv	er_address	string	Υ	NTP server address	-
		F	ohysical_	ifs	object[]	Υ	Physical IF list information	-
			phys	ical_if_id	string	Υ	Physical IF ID	-
			oppo	site_if	object	N	Counter IF information	Designated only when facing IF exists
			f	abric_type	string	Υ	Device type	"leaf" : Leaf
			r	ode_id	string	Υ	Device ID	-
			p	hysical_if_id	string	Υ	Physical IF ID of the opposite device	-
			spee	d	string	N	IF speed	Specify null if speed is not set.
		1 6	nternal_l		object[]	Υ	Internal link IF list information	-
			0109	02_ internal link informa	ation on IF informatio	n acquisiti	on internal_link_if information on contents	of object
	200	I	ag_ifs		object[]	Υ	LagIF list information	-
response	200		lag_if_id		string	Υ	LagIF ID	-
			inter	nal_options	object	N	Information for LagIF for internal link	Set only for LagIF for internal links
			i	ov4_address	string	Υ	IPv4 address	-
			c	pp <u>osite_if</u>	object	Υ	Counter IF information	-
				fabric_type	string	Υ	Counter device type	"leaf" : Leaf
				node_id	string	Υ	Counter device ID	-
				lag_if_id	string	Υ	Opposing LagIF ID	-
			minir	num_links	int	Υ	Minimum number of links	-
			spee		string	Υ	IF speed	-
			phys	ical_if_ids	string[]	Υ	Physical IF ID list constituting LAG	-
		r	p_flag		boolean	Υ	RP flag	true : RP flase : Non-RP
		r	outer_id		string	Υ	Router ID	=
		r	managen	nent_if_address	string	Υ	Management IF address	-
								"stopped":Not activated
								"unset":Activate (not set)
		l p	provision	ing_status	string	Υ	Device expansion state	"setting":Device setting in progress
		ľ		-				"boot failed":Expansion failed
								"boot complete":Expansion completed
i				d_rr_node_ids	string[]	Υ	Device ID list information of registered F	RF-
	Refer t	to the	Error	response format" shee	t for error response			

Interface name	Deletting Spine-node
Method	DELETE

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-
node_id	string	Device ID	=

#### /v1/clusters/{cluster\_id}/nodes/spines/{node\_id} URI

message	code	body	type	required	overview	remarks
request	_	-	_	_	-	_
	202	operation_id	string	Υ	非同期オペレーションの情報取得用ID	_
response	Refer t	to the "Error response format" sheet	for err	or respons	e	

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	overview	remarks
roononoo	204		-	-	-	-
response	Refer t	o the "Error response format" sheet f	for erro	or respons	e	

Interface name	Getting list of RR-node
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-

Optional parameters	type	requir	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.

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

message	code	body	type	requir	overview	remarks
request	_	_	-	_	-	_
KOODODOO	200	rr_node_ids	string[]	Υ	RR device ID list information for each SW cluster	_
response	Refer t	to the $^{\prime\prime}$ Error response format $^{\prime\prime}$ shee	t for error respo	nse		

Body uses JSON format.

## [Detailed list]

		(1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
- 11	JRI	/v1/clusters/{cluster id}/nodes/rrs?tormat=detail-list
_	71 14	/ V1/ Glusters/ [Gluster_lu]/ Houes/ 113: 101 Hat-uetail Hist

message	code	body	type	requir	overview	remarks
request	-	-	-	_	-	_
	200	rrs	object[]	Υ	RR list information for each SW cluster	_
response 010602_RR Information on the contents of rr object for acquiring information  Refer to the "Error response format" sheet for error response						

	Getting infromation of RR-node
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	_
node_id	string	Device ID	-

URI	/v1/clusters/	cluster id	/nodes/rrs/	node id	Ì
UIN	/ V I / GIUSLEI S/ I	Cluster lu	J/ 1100055/ 115/	liioue iu	J

message	code	body		type	required	overview	remarks
request	_	-		_	_	1	_
		rr		object	Υ	RR information	_
rooponoo	200		node_id	string	Υ	Device ID	_
response			router_id	string	Υ	Router ID	_
	Refer to the "Error response format" sheet for error response				esponse		_

Interface name	Getting list of interfaces
Method	GET

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

Optional parameters	type	required	overview	remarks
format	string	N	Get information type	"list": list "detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list" specification.

	Liot	
I	LIDI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces
	URI	/v1/clusters/[cluster_id]/nodes/{fabric_type}/{node_id}/interfaces?format=list

message	code	body	type	required	overview	remarks
request	_	-	-	_	-	-
		physical_if_ids	string[]	Υ	Physical IF ID list information	_
	200	internal_link_if_ids	string[]	Υ	Internal link IF ID list information	_
response		lag_if_ids	string[]	Υ	LagIF ID list information	-
	Refer to the "	Error response format" sheet for er	ror response			

Body uses JSON format.

[Detailed list]

[Detailed list]	
URI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces?format=detail-list

message	code	body	type	required	overview	remarks	
request	_	_	-	_	_	_	
		physical_ifs	object[]	Υ	Physical IF ID list information	_	
		010802_ Information on the conte	ents of physical_i	f object of p	hysical IF information acquisition		
	200	internal_link_ifs	object[]	Υ	Internal link IF ID list information	_	
response	200	010902_ internal link information	on IF informatior	n acquisition	internal_link_if information on contents of o	bbject	
		lag_ifs	object[]	Υ	LagIF ID list information	_	
		011003_LagIF Information on the contents of the lag_if object for acquiring information					
	Refer to the	$^{\prime}$ Error response format $^{\prime\prime}$ sheet for er	ror 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	_

Optional parameters	type	required	overview	remarks
format	string	N	Get information type	"list": list "detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list" specification.

-	LIOCA	
I	URI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/physical-ifs
	UNI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/physical-ifs?format=list

message	code	body	type	required	overview	remarks
request	-	_	_	-	_	_
rooponoo	200	physical_if_ids	string[]	Υ	Physical IF ID list information	-
response	<b>※</b> 1	error_message	string	N	Failure cause (exception message)	_

Body uses JSON format.

[Detailed list]

Dotalica list	
URI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/physical-ifs?format=detail-list

message	code	body	type	required	overview	remarks
request	_	-	_	-	-	-
	200	physical_ifs	object[]	Υ	Physical IF ID list information	-
response	200	010802_ Information on the content	s of physical_if ol	bject of ph	ysical IF information acquisition	
	<b>※</b> 1	error_message	string	N	Failure cause (exception message)	_

	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	-

JRI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/physical-ifs/{if_id}

message	code	body	уре	required	overview	remarks			
request	-		-	-	-	-			
		physical_if o	object	Υ	Physical IF information	-			
		physical_if_id s	string	Υ	Physical IF ID	-			
		opposite_if o	object	N	Counter IF information	Designated only when facing IF exists			
	200	fabric_type s	string	Υ	Device type	"spine" : Spine "leaf" : Leaf			
response		node_id s	string	Υ	Device ID	-			
		physical_if_id s	string	Υ	Physical IF ID of the opposite device	-			
					speed s	string	N	IF speed	Specify null if speed is not set.
		if_name s	string	N	IF name	Specify null if speed is not set.			
	<b>※</b> 1	error_message s	string		Failure cause (exception message)	_			

Interface name	Updating information of 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}/interfaces/physical-ifs/{if\_id}

message	code	body	type	required	overview	remarks
request	_	action	string	Y Control type		"speed_set": Physical port registration "speed_delete": Physical port deletion "breakoutif_create": breakout IF registration (not applicable in this version) "breakoutif delete": breakout IF deleted (not applicable in this version)
		speed	string	N	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 Refer t	- o the "Error response format" sheet for e	rror res	nonse		

Interface name	Getting list of internal-link interfaces
Method	GET

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

Optional parameters	type	required	overview	remarks
format	string	N	Get information type	"list": list "detail-list": Detailed list for sliced users or detailed list for system administrator When omitted, same as "list" specification.

LIDī	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/internal-link-ifs
URI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/internal-link-ifs?format=list

message	code	body	type	required	overview	remarks
request	_	_	_	_	-	-
waananaa	200	internal_link_if_ids	string[]	Υ	Internal link IF ID list information	_
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	required	overview	remarks
request	_	_	_	_	-	_
	200	internal_link_ifs	object[]	Υ	Internal link IF ID list information	_
response	200	010902_ internal link information or	IF information a	cquisition	internal_link_if information on contents of	bject
	Refer to the "Error response format" sheet for error response					

	Getting information of internal-link 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	_
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	overview	remarks
request	_	-	-	-		_
		internal_link_if	object	Υ	Internal link IF information	_
		internal_link_if_id	string	Υ	Internal link IF ID	_
	200	lag_if_id	string	Υ	Associated LagIF ID	_
response		operation_status	string	Υ		"up":Link up state "down":Link down state
	Refer to the "Error response format" sheet for error response					

Interface name	Creating Link-aggregation interface
Method	POST

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	_

URI	/v1/clusters/cluster id/nodes/ffabric type//node id/interfaces/lag-ifs

message	code	body	type	required	overview	remarks		
request	-	physical_if_ids	list <string></string>	Υ	Physical IF ID list	_		
rooponoo	202	operation_id	string	Υ	ID for acquiring information of asynchronous operation	_		
response	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"

message	code	body	type	required	overview	remarks
response	201	lag_if_id	string	Υ	LagIF ID	_
	Refer to the "Error response format" sheet for error response					

Interface name	Getting list of Link-aggregation 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	-

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

_	2.00	
ı	IDī	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/lag-ifs
UKI	JRI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/lag-ifs?format=list

message	code	body	type	required	overview	remarks
request	_	-	_	-	_	_
roononoo	200	lag_if_ids	string[]	Υ	LagIF ID list information	-
response	Refer to t	the "Error response format" sheet for error resp	oonse			

Body uses JSON format.

# [Detailed list]

Dotalica list	
URI	/v1/clusters/{cluster_id}/nodes/{fabric_type}/{node_id}/interfaces/lag-ifs?format=detail-list

message	code	body	type	required	overview	remarks
request	-	-	1	-	1	_
	200	lag_ifs	object[]	Υ	LagIF list information	_
response		011003_LagIF Information on the contents of the lag_if object for acquiring information				
	Refer to t	he "Error response format" sheet for error resp	onse			

Interface name	Getting information of Link-aggregation 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	-
lag_if_id	string	LagIF ID	-

URI /v1/clusters/[cluster\_id]/nodes/[fabric\_type]/[node\_id]/interfaces/lag-ifs/[lag\_if\_id]

essage	code	boo	ly		type	required	overview	remarks
equest	-	-			-	-	-	-
		lag if			object	Υ	LagIF information	-
		lag_if_id	id	string	Υ	LagIF ID	-	
		ΙĪ	inter	nal_options	object	N	Information for LagIF for internal link	Set only for LagIF for internal links
			ip	v4_address	string	Υ	IPv4 address	-
			op	oposite_if	object	Υ	Counter IF information	-
	200	fabria tuna	fabric_type	string	Υ	Counter device type	"spine" : Spine "leaf" : Leaf	
esponse				node_id	string	Υ	Counter device ID	-
				lag_if_id	string	Υ	Opposing LagIF ID	-
		1 5	minin	num_links	int	Υ	Minimum number of links	-
		[:	spee	d	string	Υ	IF speed	-
		l lī	if_nar	me	string	Υ	LagIF name	-
		ΙĪ	physi	ical_if_ids	string[]	Υ	Physical IF ID list constituting LAG	-

Interface name	Deleting information of Link-aggregation interfac
Method	DELETE

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	-
lag if id	string	LagIF ID	_

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

message	code	body	type	required	overview	remarks	
request	-	-	-	-	-	_	
roonence	202	operation_id	string	Υ	ID for acquiring information of asynchronous operation	_	
response	Refer to the "Error response format" 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	de body		required	overview	remarks	
roononoo	204 -	-	-	-	-	
response	Refer to the "Error response format" sheet for error response					

Interface name Creating edge-point  Method POST					
		POST			
			<u>.</u>		
		URI parameter	type	overview	remarks
		cluster id	string	Switch cluster ID	-
URI		/v1/clusters/{cluster_id}/po			
	code	/v1/clusters/{cluster_id}/po body		s eguired overview	remarks
	code			equired overview	remarks
message	code -	body	type re	equired overview Leaf device ID	-
message	code -	body leaf_node_id	type re	equired overview Leaf device ID LagIF ID	remarks - Specify either lag_if_id or physical_if_id.
message request response	201	body  leaf_node_id  lag_if_id	string N string N string N string N	equired overview  Leaf device ID  LagIF ID  Physical IF ID  edge-point ID	-

Interface name	Getting list of edge-points
Method	GET

URI parameter	type	overview	remarks
cluster_id	string	Switch cluster ID	-

Optional parameters	type	required	overview	remarks
format	string	N		"list":list "detail-list":Detailed list for sliced users or detailed list for system administrator When omitted, same as "list" specification.
user-type	string	N	user-type	Can be specified only when "detail-list" is specified in format. "operator": Detailed list for system administrator  >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

[List]

/v1/clusters/{cluster\_id}/points/edge-points /v1/clusters/{cluster\_id}/points/edge-points?format=list URI

message	code	body	type	required	overview	remarks
request	-	-	_	-	-	-
	200	I2_edge_point_ids	string[]	Υ	Edge-point ID list information for L2	-
response	200	I3_edge_point_ids	string[]	Υ	Edge-point ID list information for L3	-
	Refer t	to the "Error response format" sheet	for error resp	onse		

Body uses JSON format.

[Detailed list for sliced users]
URI /v1/clusters/[cluster\_id]/points/edge-points?format=detail-list

message	code	body	type	required	overview	remarks
request	-	1	_	_	-	-
		I2_edge_points	object[]	Υ	Edge-point ID list information for L2	-
		edge_point_id	string	Υ	edge-point ID	_
		I3_edge_points	object[]	Υ	Edge-point ID list information for L3	-
		edge_point_id	string	Υ	edge-point ID	-
response	200	support_protocols	string[]	Υ	Support UNI connection protocol information	Specify elements of the protocol that can be handled. If unsupported, return an empty list. Described protocols are as follows. "bgp", "ospf", "static", "vrrp"  % 13_edge_point does not describe because it always
	Refer	to the "Error response format" sheet	for error rest	onse		corresponds to direct

Body uses JSON format.

[Detailed list for system administrator]
URI |/v1/clusters/{cluster\_id}/points/edge-points?format=detail-list&user-type=operator

message	code	body	type	required	overview	remarks
request	-	-	-	-	-	-
		I2_edge_points	object[]	Υ	Edge-point ID list information for L2	-
		edge_point_id	string	Υ	edge-point ID	-
		base_if	object	Υ	base_if	-
		leaf_node_id	string	Υ	leaf_node_id	-
		lag_if_id	string	N	LagIF ID	Set either lag if id or physical if id
		physical_if_id	string	N	physical_if_id	Set either lag_ii_id or physical_ii_id
	13_edge_points edge_point_id base_if leaf_node_id	I3_edge_points	object[]	Υ	Edge-point ID list information for L3	-
		edge_point_id	string	Υ	edge-point ID	-
		base_if	object	Υ	base_if	-
response		leaf_node_id	string	Υ	leaf_node_id	-
		lag_if_id	string	N	lag_if_id	Set either lag if id or physical if id
		physical_if_id	string	N	physical_if_id	Set either lag_ii_id or physical_ii_id
		support_protocols	string[]	Υ	Support UNI connection protocol information	Specify elements of the protocol that can be handled. If unsupported, return an empty list. Described protocols are as follows. "bgp", "ospf", "static", "vrrp" % 13_edge_point does not describe because it always corresponds to direct

Interface name	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	-

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

[Detailed list for sliced users]
URI |/v1/clusters/[cluster\_id]/points/edge\_points/[edge\_point\_id]

message	code	body		type	require	overview	remarks
request	-			-	-	-	-
		edge	_point	object	Υ	Edge-point information	-
		е	dge_point_id	string	Υ	edge-point ID	=
		sı	upport_protocols	object	Υ	Support UNI connection protocol information	-
			L2	boolean	Υ	L2 correspondence propriety	Specify true only when L2 correspondence is possible
response	200		L3	boolean	Υ	L3 correspondence propriety	Specify true only when L3 correspondence is possible XIf true is specified, it implies that it corresponds to "direct"
·			L3_protocols	string[]	N	Protocol list for L3	Required only if L3 is true. If unsupported, return an empty list. Described protocols are as follows. "bgo", "ospf", "static", "vrrp"

Body uses JSON format.

[Detailed information for system administrator]
URI /v1/clusters/[cluster\_id]/points/edge-points/[edge\_point\_id]?user-type-operator

message	code	body	type	require	doverview	remarks
request	-	-	-	-	-	-
·		edge_point	object	Υ	Edge-point information	-
		edge_point_id	string	Υ	edge-point ID	_
		base_if	object	Υ	base_if	_
		leaf_node_id	string	Υ	leaf_node_id	-
		lag_if_id	string	N	LagIF ID	lag if id, physical if idのいずれか一方を設定
		physical_if_id	string	N	physical_if_id	Tag_II_Iu, priysical_II_Iuoノいタイレル・ 力を設定
		support_protocols	object	Υ	Support UNI connection protocol information	-
	200	L2	boolean	Υ	L2 correspondence propriety	Specify true only when L2 correspondence is possible
response		L3	boolean	Υ	L3 correspondence propriety	Specify true only when L3 correspondence is possible **If true is specified, it implies that it corresponds to "direct"
		L3_protocols	string[]	N		Required only if L3 is true. If unsupported, return an empty list. Described protocols are as follows. "bgp", "ospf", "static", "vrrp"

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	required	overview	remarks		
request	_	_	_	_	_	-		
	204	_	_	_	_	-		
response	Refer t	er to the "Error response format" sheet for error response						

Interface name	Creating Slice
Method	POST

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

URI	/slices/{slice_type}	

# [In the case of L2]

message	code	body	type	required	overview	remarks
request	-	slice_id	string	N	Slice ID to create	If not specified, FC will issue payout
	201	slice_id	string	Υ	ID uniquely paid out for each slice	-
response	Refer t	to the "Error response format":	sheet f	or error re	esponse	

Body uses JSON format.

# [In the case of L3]

message	code	body	type	required	overview	remarks
		slice_id	string	N	Slice ID to create	If not specified, FC will issue payout
request	_	plane	int	Υ	Belonging side	1:"A side" 2:"B side"
rooponoo	201	slice_id	string	Υ	ID uniquely paid out for each slice	-
response	Refer t	to the "Error response format":	sheet f	or error re	esponse	

Interface name	Updating Slice
Method	PUT

URI parameter	type	overview	remarks
slice_type	string		"l2vpn":L2 slice "l3vpn":L3 slice
slice_id	string	Slice ID	Specify the ID described in the "Add slice" response

URI /v1/slices/{slice\_type}/{slice\_id}

message	code	body	type	required	overview	remarks
request	-	action	string	Y	Control type	[Slice state change request request] "activate_reserve": Enable Reservation "activate": Activate "reserve_cancel": enable / disable unreserve "deactivate_reserve": invalidation reservation "deactivate": invalidate [Request for collective change of CP setting] "activate_cps": Bulk activation "deactivate cps": Bulk invalidation
	200	status	string	Υ	Slice effective state after status update	"inactive" : inactive "active" : active
response		reservation_status	string	Y	Change reservation state after status update	"none":No reservation "activate_reserve":Enable Reservation "deactivate_reserve":Disable reserved
		· -	string		ID for acquiring information of asynchronous operation	In the case of [CP setting collective change request], asynchronous response
	Refer t	to the "Error response forma	t" sheet for	error res	sponse	

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	overview	remarks
rooponoo	200	updated_cps	string[]	Υ	List of status-updated CPs	If there is no updated one, an empty list
response	Refer	to the "Error response forma	$\operatorname{it}''$ sheet for	error re	sponse	

Interface name	Deleting Slice
Method	DELETE

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

URI	/1/slices/Íslice type}//slice id

message	code	body	type	required	overview	remarks		
request	-	-	-	-	-	-		
	204	-	-	-	-	-		
response	Refer to the "Error response format" sheet for error response							

	Getting information of Slice
Method	GET

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

URI /v1/slices/{slice\_type}/{slice\_id}

[In the case of L2]

message	code	body	type	required	overview	remarks
request	-	_	_	-	-	-
		I2_slice	object	Υ	L2 slice information	_
		slice_id	string	Υ	Slice ID	_
	200	status	string	Υ	Slice effective state	"inactive" : inactive "active" : active
response	200	reservation_status	string	Υ	Change reserved state	"none":No reservation "activate_reserve":Enable Reservation "deactivate_reserve":Disable reserved
		I2_cp_ids	string[]	Υ	Related L2 CP list information	_
	Refer t	to the "Error response format"	sheet for erro	or respon	se	_

Body uses JSON format.

[In the case of L3]

		1 1	1.			
message	code	body	type	required	overview	remarks
request	-	1	-	-	-	-
		I3_slice	object	Υ	L3 slice information	-
		slice_id	string	Υ	Slice ID	_
		plane	int	Υ	Belonging side	1 : "A side" 2 : "B side"
response	200	status	string	Υ	Slice effective state	"inactive" : inactive "active" : active
		reservation_status	string	Υ	Change reserved state	"none":No reservation "activate_reserve":Enable Reservation "deactivate_reserve":Disable reserved
		I3_cp_ids	string[]	Υ	Related L3 CP list information	-
	Refer t	o the "Error response format	sheet for en	or respon	se	-

Interface name	Getting list of Slices
Method	GET

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

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

[list]

ı	URI	/v1/slices/{slice_type}
	UKI	/v1/slices/[slice_type]?format=list

[In the case of L2]

message	code	body	type	required	overview	remarks			
request	-	_	-	-	-	-			
rocponco	200	I2_slice_ids	string[]	Υ	L2 slice ID information list	-			
response	Refer t	Refer to the "Error response format" sheet for error response							

Body uses JSON format.

[In the case of L3]

message	code	body	type	required	overview	remarks		
request	-	-	-	-	-	-		
rocponco	200	l3_slice_ids	string[]	Υ	L3 slice ID information list	-		
response	Refer to the "Error response format" sheet for error response							

Body uses JSON format.

[Detailed list]

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

[In the case of L2]

message	code	body	type	required	overview	remarks					
request	-	_	ı	-	-	-					
	200	I2_slices	object[]	Υ	L2 slice ID information list	_					
response	200	Information on the contents of the I2_slice object of "020104_Get slice"									
	Refer t	Refer to the "Error response format" sheet for error response									

Body uses JSON format.

[In the case of L3]

In the case c	) LO	LUJ									
message	code	body	type	required	overview	remarks					
request	_	_	_	-	-	-					
	200	I3_slices	object[]	Υ	L3 slice ID information list	_					
response	200	Information on the contents of the I3_slice object of "020104_Get slice"									
	Refer	to the "Error response forma	t" sheet for	error resp	onse						

Interface name	Creating CP
Method	POST

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

URI /v1/slices/{slice\_type}/{slice\_id}/cps

[In the case of L2]

message	code	body	type	required	overview	remarks				
		cluster_id	string	Υ	Switch cluster ID	_				
		edge_point_id	string	Υ	Edge-point ID to be created for CP	_				
request -		vlan_id	int	Υ	VLAN ID	VLAN ID of CP				
	_	cp_id	string	N	I(;reate (;P II)	When using the specified parameter from the higher sytem				
		port_mode	string	Υ	Port mode of VLAN	"access": Access mode "trunk": Trunk mode				
		cp_id	string		ID uniquely paid out for each CP	_				
response	Refer to the "Error response format" sheet for error response									

Body uses JSON format.

essage	code	body	type	require	d overview	remarks
		cluster_id	string	Υ	Switch cluster ID	-
		edge_point_id	string	Υ	Edge-point ID to be created for CP	-
		vlan_id	int	Υ	VLAN ID	CPのVLAN ID 0~4096 (0 is used as a physical port)
		mtu	int	Υ	MTU value per CP IF	-
		cp_id	string	N	Create CP ID	When using the specified parameter from the higher system
		ipv4 addr	string	N	Housing equipment IF address (IPv4)	Either ipv6_addr is required
		ipv6 addr	string	N	Housing equipment IF address (IPv6)	Either ipv4 addr is required
		ipv4_prefix	int	N	ipv4_prefix	0~31 Required when ipv4_addr is specified
		ipv6_prefix	int	N	ipv6_prefix	0~64 Required when ipv6_addr is specified
		bgp	obiect	N	Information for BGP	Specified when setting "bgp"
		role	string	Υ	Role information	"master" "slave"
quest	-	neighbor as	int	Υ	Opposing AS number	_
•		neighbor ipv4 addr	string	N	Counter device IPv4 address	Either ipv6 addr is required
		neighbor_ipv6_addr	string	N	Counter device IPv6 address	Either ipv4 addr is required
		ospf	object	N	Information for OSPF	Specified when setting "ospf"
		metric	int	Υ	Metric value	common between IPv4 and IPv6
		static routes	list <object></object>	N	Static Route Information List	Specified when setting "static"
		addr_type	string	Υ	IP address type	"ipv4" "ipv6"
		addr	string	Υ	destination address	-
		prefix	int	Υ	Destination prefix	-
		next_hop	string	Υ	NEXT HOP	-
		vrrp	object	N	Information for VRRP	Specified when setting "vrrp"
		group_id	int	Υ	VRRP group ID	-
		role	string	Υ	The role of VRRP to configure	"master" "slave"
		virtual_ipv4_addr	string	N	Virtual IF address (IPv4)	Either ipv6_addr is required
		virtual_ipv6_addr	string	N	Virtual IF address (IPv6)	Either ipv4_addr is required
sponse	201	cp id	string	Υ	ID uniquely paid out for each CP	_

Interface name	Updating 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	-

/v1/slices/{slice\_type}/{slice\_id}/cps/{cp\_id}

### [In the case of L2]

message	code	body	type	required	overview	remarks				
request	_	action	string	Υ	Control type	"Activate_reserve": Enable Reservation "Reserve_cancel": enable / disable unreserve "Deactivate_reserve": invalidation reservation "Force delete": forced deletion (not applicable in this version)				
		status	string	Υ	CP effective state after status update	"inactive":inactive "active":active				
response	200	reservation_status	string	Υ	Change reservation state after status update	"none":No reservation "activate_reserve":Enable Reservation "deactivate_reserve":Disable reserved				
I	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	overview	remarks
	204	_	-	_	-	When action is "force_delete" and processing is successful
response	Refer t	o the "Error response format	t" sheet for e	rror respo	onse	

Body uses JSON format.

### 【L3の場合】

message	code	boo	ly		type	required	overview	remarks		
		act	ion		string	Υ	Control type	"Activate_reserve": Enable Reservation "Reserve_cancel": enable / disable unreserve "Deactivate_reserve": invalidation reservation "Update": Change "Force delete": forced deletion (not applicable in this version)		
		upo	late	e_option	object	-	Option information for change	Required when action is "update"		
request	_		оре	eration_type	string	Υ	Operation type	"Add": Static route addition "Delete": Delete static route information		
			sta	tic_routes	list <object></object>	Υ	Static Route Information List	Add or delete static route information list		
							addr_type	string	Υ	IP address type
				addr	string	Υ	destination address	-		
				prefix	int	Υ	Destination prefix	-		
				next_hop	string	Υ	NEXT HOP	-		
		status			string	Υ	CP effective state after status update	"inactive":inactive "active":active		
response	200	rese	erv	ration_status	string	Υ	Change reservation state after status update	"none":No reservation "activate_reserve":Enable Reservation "deactivate_reserve":Disable reserved		
			operation_id		string	Υ	ID for acquiring information of asynchronous ope			
	Refer t	o th	ıe ′	Error response format	$t''$ sheet for $e_l$	rror respo	onse			

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	overview	remarks				
	200	_	_	_	-	When action is "update" and processing is successful				
response	204	-	_	_	-	When action is "force_delete" and processing is successful				
	Refer to the "Error response format" sheet for error response									

Interface name	Deleting CP
Method	DELETE

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

URI	/v1/slices/slice type}/	slice id/cps/{cp id}	

message	code	body	type	required	overview	remarks
request	-	_	_	_	-	-
roomanaa	204		_	_	-	-
response	Refer to	o the "Error response forma	t" sheet	for error	response	

Interface name	Getting information of CP
Method	GET

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

URI /v1/slices/[slice\_type]/[slice\_id]/cps/[cp\_id]

[In the case of L2]

message	code	body	type	required	overview	remarks		
request	-	-	-	-	-	-		
		12_cp	object	Υ	L2CP information	-		
		cp_id	string	Υ	L 2CP ID	-		
		slice_id	string	Υ	Slice ID	_		
		cluster_id	string	Υ	SW cluster ID	_		
		edge_point_id	string	Υ	CP creation destination edge-point ID	-		
		port_mode	string	Υ	Port mode of VLAN	"access": Access mode "trunk": Trunk mode		
response	200	status	string	Υ	CP effective state	"inactive" : inactive "active" : active		
response				reservation_status	string	Υ	Change reserved state	"none": No reservation "activate_reserve": Enable Reservation "deactivate_reserve": Disable reserved
		operation_status	string	Y	IF state	"Unknown": unknown "Up": link up state "Down": link down state  When "status" is invalid. "unknown" is stated		

Body uses JSON format.

[In the case of L3]

nessage	code	body	type	required	overview	remarks
equest	-	-	-	-	_	_
		I3_cp	object	Υ	L3CP information	-
		cp id	string	Υ	L3CP ID	=
		slice id	string	Υ	Slice ID	_
		cluster id	string	Υ	SW cluster ID	_
		edge point id	string	Y	CP creation destination edge-point ID	_
		<u> </u>				VLAN ID of CP
		vlan_id	int	Υ	VLAN ID	0~4096 (0 is used as a physical port)
		mtu	int	Υ	MTU value per CP IF	- 1000 (0 10 dood do d physical port)
		ipv4 addr	string	N	ipv4 addr	Described only when it is set
		ipv6 addr	string	N	ipv6 addr	Described only when it is set
		ipvo_addi	String	IN	ipvo_addi	0~31
		ipv4_prefix	int	N	ipv4_prefix	
					· -	Required when ipv4_addr is specified
		ipv6 prefix	int	N	ipv6 prefix	0~64
				<b>.</b>	, =	Required when ipv6_addr is specified
		bgp	object	N	Information for BGP	Described only when "bgp" is specified
		role	string	Υ	Role information	"master"
				·		"slave"
		neighbor_as	int	Υ	Opposing AS number	-
		neighbor_ipv4_addr	string	N	Counter device IPv4 address	Described only when it is set
		neighbor_ipv6_addr	string	N	Counter device IPv6 address	Described only when it is set
		ospf	object	N	Information for OSPF	Described only when "ospf" is specified
	200	metric	int	Υ	Metric value	IPv4.IPv6共通
		static routes	obiect∫	N	Static Route Information List	Described only when "static" is specified
		addr type	string	Υ	IP address type	"ipv4"
sponse		addr	string	Y	destination address	″ipv6″
		prefix	int	V	Destination prefix	_
		next hop	string	Ϋ́	NEXT HOP	
		vrrp	object · ·	N	Information for VRRP	Described only when "vrrp" is specified
		group_id	int	Υ	VRRP group ID	- 
		role	string	Υ	The role of VRRP to configure	"master"
				<b>.</b>	· ·	"slave"
		virtual_ipv4_addr	string	N	Virtual IF address (IPv4)	Described only when it is set
		virtual_ipv6_addr	string	N	Virtual IF address (IPv6)	Described only when it is set
		status	string	Υ	CP effective state	"inactive": inactive
		Status	otring		or enective state	"active": active
						"none": No reservation
		reservation_status	string	Υ	Change reserved state	"activate_reserve": Enable Reservation
						"deactivate reserve": Disable reserved
						"Unknown": unknown
						"Up": link up state
		operation_status	string	Υ	IF state	"Down": link down state
						When "status" is invalid. "unknown" is stated List of supported protocol information
						List of supported protocol information
						"Bgp"
		11		.,		"Ospf"
		support_protocols	string[]	Υ	Support UNI connection protocol informatio	
						"Vrrp"
		1 1				※ I3_edge_point does not describe because it always
		I I to the "Error response format	,	į.		corresponds to direct

Interface name	Getting lists of CP
Method	GET

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

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

[list]

ι	URI	/v1/slices/{slice_type}/{slice_id}/cps/
	OKI	/v1/slices/[slice_type]/[slice_id]/cps/?format=list

[In the case of L2]

message	code	body	type	required	overview	remarks	
request	-	-	-	-	-	-	
response	200	I2_cp_ids	string[]	Υ	L2CP ID list information	-	
	Refer to the "Error response format" sheet for error response						

Body uses JSON format.

[In the case of L3]

Tarr cirio odoo or	201							
message	code	body	type	required	overview	remarks		
request	-	_	_	_	_	-		
rooponoo	200	I3_cp_ids	string[]	Υ	L3CP ID list information	_		
response	Refer to the "Error response format" sheet for error response							

Body uses JSON format.

[Detailed list]

Dotalica list	
URI	/v1/slices/{slice_type}/{slice_id}/cps/?format=detail-list

[In the case of L2]

message	code	body	type	required	overview	remarks		
request	-	_	-	_	_	_		
	200	I2_cps	object[]	Υ	L2CP ID list information	_		
response	200	Information on the conten						
	Refer to the "Error response format" sheet for error response							

Body uses JSON format.

[In the case of L3]

In the case of Es								
message	code	body	type	required	overview	remarks		
request	-	-	-	_		_		
response	200		object[]		L3CP ID list information	_		
		Information on the conten	ts of the I3_c					
	Refer to the "Error response format" sheet for error response							