

Dell EMC Storage Systems

REST API for the metro node appliance

# Table of Contents

1. Overview .....	1
1.1. Version information .....	1
1.2. Tags .....	1
2. Security .....	3
2.1. basicAuth .....	3
2.2. jwtAuth .....	3
3. Resources .....	4
3.1. Aggregate .....	4
3.1.1. Groups the resources at the given URI by the values of the provided fields and returns aggregated computations for each group .....	4
3.2. Amp .....	4
3.2.1. Register a new ArrayManagementProvider .....	4
3.2.2. Returns a list of registered AMPs .....	5
3.2.3. Returns the details of an AMP .....	6
3.2.4. Unregisters an AMP .....	6
3.3. Bulk .....	6
3.3.1. Make a bulk request .....	7
3.4. Certificates .....	8
3.4.1. Add the certificate to the keystore. ....	8
3.4.2. Fetch the certificate from the keystore. ....	9
3.4.3. Remove the certificate from the keystore. ....	9
3.4.4. Fetches the SSL Certificate of an external system. ....	10
3.5. Cluster_witness .....	11
3.5.1. Return the cluster witness wired to the system .....	11
3.5.2. Deletes the cluster witness configuration. ....	11
3.5.3. Update attributes of a cluster witness. ....	11
3.6. Clusters .....	12
3.6.1. Returns a list of the available clusters .....	12
3.6.2. Return a Cluster matching the provided name .....	13
3.6.3. Update attributes of a cluster .....	14
3.7. Consistency_group .....	15
3.7.1. Create a new ConsistencyGroup .....	15
3.7.2. Returns a list of ConsistencyGroups .....	16
3.7.3. Returns a single ConsistencyGroup object .....	17
3.7.4. Deletes a single ConsistencyGroup .....	18
3.7.5. Update attributes on a ConsistencyGroup .....	18
3.8. Data_migration .....	19
3.8.1. Create a new DeviceMigration .....	19

3.8.2. Returns a list of device migrations .....	20
3.8.3. Returns a single DeviceMigration object .....	21
3.8.4. Deletes a single canceled or committed DeviceMigration .....	22
3.8.5. Update attributes on a DeviceMigration .....	22
3.8.6. Create a new ExtentMigration .....	23
3.8.7. Returns a list of extent migrations .....	24
3.8.8. Returns a single ExtentMigration object .....	25
3.8.9. Deletes a single canceled or committed ExtentMigration .....	26
3.8.10. Update attributes on a ExtentMigration .....	26
3.9. Devices .....	27
3.9.1. Create a new Device .....	27
3.9.2. Returns a list of Device objects .....	28
3.9.3. Returns a single Device object .....	29
3.9.4. Deletes a single Device .....	30
3.9.5. Update attributes of a local device .....	30
3.10. Director .....	31
3.10.1. Returns a list of the available directors .....	31
3.10.2. Return a Director matching the provided name .....	32
3.11. Director_ports .....	33
3.11.1. Returns a list of director ports .....	33
3.11.2. Returns a single DirectorPort object .....	34
3.11.3. Update attributes on a DirectorPort .....	34
3.12. Distributed_storage .....	35
3.12.1. Create a new distributed ConsistencyGroup .....	35
3.12.2. Returns a list of distributed ConsistencyGroups .....	36
3.12.3. Returns a single distributed ConsistencyGroup object .....	37
3.12.4. Deletes a single distributed ConsistencyGroup .....	37
3.12.5. Update attributes on a distributed ConsistencyGroup .....	38
3.12.6. Manually resume I/O to the virtual-volumes in a distributed consistency group. In a cluster-partition scenario where the ruleset does not indicate an automatic winner, this endpoint will select the winning cluster where I/O should continue. After a cluster-partition is resolved, in the case that auto-resume-at-loser is set to false, this endpoint will resume I/O on the losing cluster.	39
3.12.7. Create a new DistributedDevice .....	40
3.12.8. Returns a list of DistributedDevices .....	40
3.12.9. Returns a single DistributedDevice object .....	41
3.12.10. Deletes a single DistributedDevice .....	42
3.12.11. Update attributes on a DistributedDevice .....	42
3.12.12. Manually resume I/O to a distributed device that supports a distributed virtual- volume.	43
3.12.13. Create a new distributed VirtualVolume .....	43

3.12.14. Returns a list of distributed VirtualVolumes .....	44
3.12.15. Returns a single distributed VirtualVolume object .....	45
3.12.16. Deletes a single distributed VirtualVolume .....	46
3.12.17. Update attributes on a distributed VirtualVolume .....	46
3.12.18. Expand the capacity of a distributed VirtualVolume .....	47
3.12.19. Returns a list of RuleSets .....	48
3.12.20. Returns a single RuleSet object .....	49
3.13. Engine .....	49
3.13.1. Returns a list of the available engines .....	49
3.13.2. Return a Engine matching the provided name .....	50
3.14. Events .....	51
3.14.1. Generate Events from different clients to Notification Server .....	51
3.15. Exports .....	52
3.15.1. Registers an InitiatorPort .....	52
3.15.2. Returns a list of InitiatorPort objects .....	52
3.15.3. Rediscover initiator ports .....	53
3.15.4. Returns a single InitiatorPort object .....	53
3.15.5. Unregister an InitiatorPort .....	54
3.15.6. Update attributes on an InitiatorPort .....	54
3.15.7. Returns a list of Port objects .....	55
3.15.8. Returns a single Port object .....	56
3.15.9. Update attributes on a Port .....	56
3.15.10. Create a new StorageView .....	57
3.15.11. Returns a list of StorageView objects .....	57
3.15.12. Returns a single StorageView .....	58
3.15.13. Deletes a single StorageView .....	59
3.15.14. Update attributes on a StorageView .....	59
3.16. Extent .....	60
3.16.1. Create a new Extent .....	60
3.16.2. Returns a list of Extent objects .....	61
3.16.3. Returns a single Extent object .....	62
3.16.4. Delets a single Extent object .....	63
3.16.5. Update attributes on a Extent .....	64
3.17. Hardware_ports .....	65
3.17.1. Returns a list of hardware ports .....	65
3.18. Health .....	66
3.18.1. Return local-COM health information .....	66
3.18.2. Return WAN-COM health information .....	67
3.19. Jobs .....	67
3.19.1. Create a VIAS provisioning job .....	67
3.19.2. Get all the current VIAS provisioning jobs .....	68

3.19.3. Get the status of a VIAS provisioning job .....	69
3.19.4. Delete a VIAS provisioning jobs .....	69
3.19.5. Cancel a vias provisioning job .....	70
3.19.6. Resubmit a vias provisioning job .....	70
3.20. Licenses .....	70
3.20.1. Install a new license file .....	70
3.20.2. Returns a list of installed licenses on the setup .....	71
3.20.3. Deletes the licenses .....	72
3.20.4. Validate a license file .....	72
3.21. Logger .....	73
3.21.1. Log information on the server. This endpoint is intended for internal system use only.	73
3.22. Logging_volume .....	73
3.22.1. Creates a new Logging Volume .....	73
3.22.2. Returns a list of LoggingVolume objects. Supports paging .....	74
3.22.3. Returns a single LoggingVolume by name .....	75
3.22.4. Deletes a single LoggingVolume .....	76
3.23. Logical_units .....	76
3.23.1. Returns a list of LogicalUnits .....	77
3.23.2. Forgets logicalUnits in an array .....	77
3.23.3. Returns a single LogicalUnit by name .....	78
3.24. Maps .....	78
3.24.1. Get the parents and children for the passed element .....	78
3.25. Meta_volume .....	79
3.25.1. Create a new MetaVolume .....	79
3.25.2. Returns a list of MetaVolume objects. Supports paging .....	80
3.25.3. Returns a single MetaVolume by name .....	81
3.25.4. Deletes a single MetaVolume .....	82
3.25.5. Update attributes on a MetaVolume .....	83
3.26. Metadata_backup .....	84
3.26.1. Create List of configured MetaData Backups Volume with their scheduled time .....	84
3.26.2. List the configured MetaData Backup settings .....	85
3.26.3. Delete configured Metadata backup settings .....	85
3.27. Monitors .....	86
3.27.1. Return the list of names of active performance monitors .....	86
3.27.2. Return performance stats for the given perf monitor. ....	87
3.27.3. Return the list of names of active vvol monitors .....	87
3.27.4. Return performance stats for the given vvol monitor. ....	88
3.28. Permissions .....	88
3.28.1. Returns the Role-Based Authentication configuration .....	88
3.28.2. Return the Role-Based Authentication configuration for one role .....	89
3.28.3. Modify the Role-Based Authentication configuration for this role .....	89

3.29. Storage_array .....	90
3.29.1. Returns a list of StorageArrays .....	90
3.29.2. Returns a single StorageArray by name .....	91
3.29.3. Get the default name mapping for claimable volumes on this array .....	92
3.29.4. Rediscover LUNs on the array .....	93
3.30. Storage_group .....	93
3.30.1. Return the list storage groups .....	93
3.30.2. Return details of a given storage group .....	94
3.31. Storage_pool .....	95
3.31.1. Return the list storage pools .....	95
3.31.2. Return details of a given storage pool .....	96
3.32. Storage_volume .....	96
3.32.1. Returns a list of StorageVolume objects. Supports paging .....	96
3.32.2. Returns a single StorageVolume by name .....	98
3.32.3. Storage volume is not really missing it will reappear after being forgotten .....	99
3.32.4. Update attributes on a StorageVolume .....	100
3.32.5. Claim a StorageVolume .....	101
3.32.6. Unclaim a StorageVolume .....	103
3.33. System_config .....	105
3.33.1. Return the system configuration .....	105
3.34. Token .....	106
3.34.1. URL to authenticate and get back access_token in case of success .....	106
3.34.2. Endpoint to logout and invalidate/delete the token .....	107
3.35. Version .....	107
3.35.1. Returns a list of versions of the VPLEX components .....	107
3.36. Virtual_volume .....	108
3.36.1. Create a new virtual volume .....	108
3.36.2. Returns a list of virtual volumes .....	109
3.36.3. Return a VirtualVolume matching the provided name .....	110
3.36.4. Deletes a single VirtualVolume .....	111
3.36.5. Update attributes on a VirtualVolume .....	112
3.36.6. cache invalidate on virtual volume .....	113
3.36.7. Expand the capacity of a VirtualVolume .....	113
4. Definitions .....	115
4.1. Aggregate .....	115
4.2. Aggregates .....	115
4.3. ArrayManagementProvider .....	115
4.4. BulkResponse .....	115
4.5. BulkResponse_tasks .....	116
4.6. Certificate .....	116
4.7. Cluster .....	116

4.8. ClusterWitness	117
4.9. ClusterWitness_components	118
4.10. ConsistencyGroup	118
4.11. ConsistencyGroup_operational_status	118
4.12. Device	119
4.13. DeviceMigration	120
4.14. Director	121
4.15. DirectorPort	122
4.16. DistributedDevice	122
4.17. Engine	123
4.18. Error	124
4.19. Extent	124
4.20. ExtentMigration	125
4.21. HardwarePort	126
4.22. HardwarePorts	126
4.23. InitiatorPort	126
4.24. JsonPatchOp	127
4.25. License	127
4.26. LicenseArray	128
4.27. LocalComHealth	128
4.28. LoggingVolume	128
4.29. LogicalUnit	129
4.30. LoginPayload	129
4.31. LoginResponse	130
4.32. MetaVolume	130
4.33. Monitors	131
4.34. Permission	131
4.35. Port	131
4.36. Port_exports	132
4.37. RuleSet	132
4.38. StorageArray	132
4.39. StorageGroup	133
4.40. StorageMap	133
4.41. StoragePool	134
4.42. StorageView	134
4.43. StorageView_virtual_volumes	134
4.44. StorageVolume	135
4.45. StorageVolume_itls	136
4.46. SystemConfig	136
4.47. SystemConfig_branding	136
4.48. Version	137

4.49. Versions	137
4.50. ViasJob	137
4.51. ViasJob_storage_pools	138
4.52. VirtualVolume	138
4.53. WanComHealth	139
4.54. admin_state	139
4.55. amp_payload	139
4.56. certificate_payload	140
4.57. cg_resume_payload	140
4.58. claim_payload	140
4.59. com_status	140
4.60. communication_status	140
4.61. connectivity_status	140
4.62. consistency_group_payload	140
4.63. device_migration_payload	141
4.64. device_payload	141
4.65. distributed_consistency_group_payload	141
4.66. distributed_device_payload	141
4.67. distributed_virtual_volume_expand_payload	142
4.68. distributed_virtual_volume_payload	142
4.69. event_additionalData	142
4.70. events_payload	142
4.71. extent_migration_payload	143
4.72. extent_payload	143
4.73. health_state	143
4.74. inline_response_200	143
4.75. inline_response_200_1	144
4.76. inline_response_200_claimable_storage_volumes	144
4.77. inline_response_201	144
4.78. jobs_storage_pools	144
4.79. license_payload	144
4.80. logging_volume_payload	145
4.81. meta_volume_payload	145
4.82. metadata_backup_payload	145
4.83. operational_status	145
4.84. rediscover_payload	145
4.85. register_payload	146
4.86. role	146
4.87. status	146
4.88. storage_array_family	146
4.89. storage_view_payload	146



4.90. unclaim_payload .....	146
4.91. validate_payload .....	147
4.92. vias_payload .....	147
4.93. virtual_volume_expand_payload .....	147
4.94. virtual_volume_payload .....	147

# Chapter 1. Overview

A definition for the next-gen VPLEX API

## 1.1. Version information

*Version* : 0.1

## 1.2. Tags

- aggregate
- amp
- bulk
- certificates
- cluster\_witness
- clusters
- consistency\_group
- data\_migration
- devices
- director
- director\_ports
- distributed\_storage
- engine
- events
- exports
- extent
- hardware\_ports
- health
- jobs
- licenses
- logger
- logging\_volume
- logical\_units
- maps
- meta\_volume
- metadata\_backup

- monitors
- permissions
- storage\_array
- storage\_group
- storage\_pool
- storage\_volume
- system\_config
- token
- version
- virtual\_volume

# Chapter 2. Security

## 2.1. basicAuth

*Type* : basic

## 2.2. jwtAuth

*Type* : apiKey

*Name* : Authorization

*In* : HEADER

# Chapter 3. Resources

## 3.1. Aggregate

3.1.1. Groups the resources at the given URI by the values of the provided fields and returns aggregated computations for each group

```
GET /aggregates
```

### Parameters

Type	Name	Description	Schema
Query	<b>group_by</b> <i>required</i>	Comma-separated list of fields to aggregate on	string
Query	<b>uri</b> <i>required</i>	URI of collection to aggregate	string

### Responses

HTTP Code	Description	Schema
200	A JSON array of aggregates	<a href="#">Aggregates</a>

## 3.2. Amp

### 3.2.1. Register a new ArrayManagementProvider

```
POST /clusters/{cluster_name}/array_management_providers
```

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>amp_payload</b> <i>required</i>		<a href="#">amp_payload</a>

### Responses

HTTP Code	Description	Schema
201	Successfully registered the ArrayManagementProvider <b>Headers :</b> <b>Location</b> (string) : URI of registered AMP.	<a href="#">ArrayManagementProvider</a>
400	Bad request, for incorrect IP address	<a href="#">Error</a>
401	Unauthorized error, in case of invalid username or password	<a href="#">Error</a>

### 3.2.2. Returns a list of registered AMPs

```
GET /clusters/{cluster_name}/array_management_providers
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>connectivity_status</b> <i>optional</i>	Filter results by connectivity_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

#### Responses

HTTP Code	Description	Schema
200	A JSON array of registered AMPs <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">ArrayManagementProvider</a> > array
500	Internal server error	<a href="#">Error</a>

### 3.2.3. Returns the details of an AMP

```
GET /clusters/{cluster_name}/array_management_providers/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

#### Responses

HTTP Code	Description	Schema
200	A single AMP	<a href="#">ArrayManagementProvider</a>

### 3.2.4. Unregisters an AMP

```
DELETE /clusters/{cluster_name}/array_management_providers/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Successfully unregistered the ArrayManagementProvider	No Content

## 3.3. Bulk

### 3.3.1. Make a bulk request

POST /bulk/

#### Parameters

Type	Name	Schema
Body	<b>request</b> <i>required</i>	< string, object > map

#### Responses

HTTP Code	Description	Schema
200	A summary of the results of the request. This response indicates that the request was successfully processed, not necessarily that every task succeeded. The caller should inspect the content of the response to see which tasks failed.	<a href="#">BulkResponse</a>
400	One of the specified objects requested was invalid. As a result, none of the tasks were attempted.	No Content

#### Example HTTP response

##### Response 200

```
{
  "status" : "ok",
  "tasks" : [ {
    "status" : "ok",
    "object" : "/clusters/cluster-
2/storage_volumes/VPD83T3:600014400000001001f6383efd6c62c9"
  }, {
    "status" : "error",
    "object" : "/clusters/cluster-
2/storage_volumes/VPD83T3:600014400000001001f6383efd6c62cb",
    "reason" : {
      "code" : "7",
      "cmd" : "amf rename amf",
      "params" : {
        "newname" : "bulk_claim_2"
      }
    }
  }
]
}
```



## 3.4. Certificates

### 3.4.1. Add the certificate to the keystore.

```
POST /external_certificates/trusted/{external_certificate}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>external_certificate</b> <i>required</i>	The IP:PORT of system associated with this certificate.	string
Body	<b>certificate_payload</b> <i>required</i>		<a href="#">certificate_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Added the certificate to the keystore.	<a href="#">Certificate</a>
500	Unable to add the certificate	<a href="#">Error</a>

#### Consumes

- `application/json`

#### Produces

- `application/json`

#### Example HTTP response

##### Response 201

```
{
  "ip_address" : "10.228.69.183",
  "issued_to" : "CN=dsvef103.lss.emc.com",
  "issued_by" : "CN=dsvef103.lss.emc.com-3KWZ7Q XMS Root CA",
  "issued_on" : "Mon Sep 18 07:09:29 UTC 2017",
  "expires_on" : "Fri Sep 18 07:09:29 UTC 2020",
  "SHA1" : "0d e0 ad 22 f2 de 35 25 9c dd 4d 6f 2d e2 25 e0 62 db 70 f6",
  "MD5" : "2d e3 a0 b8 54 77 6c",
  "encoded_certificate" : "Mkjhsdhna1ka76e87dbnw8nk=="
}
```

### 3.4.2. Fetch the certificate from the keystore.

```
GET /external_certificates/trusted/{external_certificate}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>external_certificate</b> <i>required</i>	The IP:PORT of system associated with this certificate.	string

#### Responses

HTTP Code	Description	Schema
200	Added the certificate to the keystore.	<a href="#">Certificate</a>

#### Produces

- `application/json`

#### Example HTTP response

##### Response 200

```
{
  "ip_address" : "10.228.69.183",
  "issued_to" : "CN=dsvef103.lss.emc.com",
  "issued_by" : "CN=dsvef103.lss.emc.com-3KWZ7Q XMS Root CA",
  "issued_on" : "Mon Sep 18 07:09:29 UTC 2017",
  "expires_on" : "Fri Sep 18 07:09:29 UTC 2020",
  "SHA1" : "0d e0 ad 22 f2 de 35 25 9c dd 4d 6f 2d e2 25 e0 62 db 70 f6",
  "MD5" : "2d e3 a0 b8 54 77 6c",
  "encoded_certificate" : "Mkjhsdhna1ka76e87dbnw8nk=="
}
```

### 3.4.3. Remove the certificate from the keystore.

```
DELETE /external_certificates/trusted/{external_certificate}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>external_certificate</b> <i>required</i>	The IP:PORT of system associated with this certificate.	string

## Responses

HTTP Code	Description	Schema
204	Deleted the certificate from the keystore.	No Content

### 3.4.4. Fetches the SSL Certificate of an external system

```
GET /external_certificates/untrusted/{external_certificate}
```

## Parameters

Type	Name	Description	Schema
Path	<b>external_certificate</b> <i>required</i>	The IP:PORT of system associated with this certificate.	string

## Responses

HTTP Code	Description	Schema
200	A JSON Object with all the certificate details	<a href="#">Certificate</a>

## Produces

- `application/json`

## Example HTTP response

### Response 200

```
{
  "ip_address" : "10.228.69.183",
  "issued_to" : "CN=dsvef103.lss.emc.com",
  "issued_by" : "CN=dsvef103.lss.emc.com-3KWZ7Q XMS Root CA",
  "issued_on" : "Mon Sep 18 07:09:29 UTC 2017",
  "expires_on" : "Fri Sep 18 07:09:29 UTC 2020",
  "SHA1" : "0d e0 ad 22 f2 de 35 25 9c dd 4d 6f 2d e2 25 e0 62 db 70 f6",
  "MD5" : "2d e3 a0 b8 54 77 6c",
  "encoded_certificate" : "Mkjhsdhna1ka76e87dbnw8nk=="
}
```

## 3.5. Cluster\_witness

### 3.5.1. Return the cluster witness wired to the system

```
GET /cluster_witness
```

#### Responses

HTTP Code	Description	Schema
200	The cluster witness	<a href="#">ClusterWitness</a>
404	When no cluster witness is configured	<a href="#">Error</a>

#### Example HTTP response

##### Response 200

```
{
  "admin_state" : "enabled",
  "public_ip_address" : "10.226.27.3",
  "username" : "cwsAdmin"
}
```

### 3.5.2. Deletes the cluster witness configuration.

```
DELETE /cluster_witness
```

#### Description

Cluster witness can't be deleted if its currently enabled. Only Supported on VS2 and VS6 system.

#### Responses

HTTP Code	Description	Schema
204	Cluster witness configuration deleted.	No Content

### 3.5.3. Update attributes of a cluster witness.

```
PATCH /cluster_witness
```

## Description

Settable attributes are 'admin state', but only on VS2 and VS6 systems.

## Parameters

Type	Name	Schema
Body	<b>clusterwitness_patch_payload</b> <i>required</i>	< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated cluster-witness.	<a href="#">ClusterWitness</a>

## Example HTTP response

### Response 200

```
{
  "admin_state" : "enabled",
  "public_ip_address" : "10.226.27.3",
  "username" : "cwsAdmin"
}
```

## 3.6. Clusters

### 3.6.1. Returns a list of the available clusters

```
GET /clusters/
```

## Parameters

Type	Name	Description	Schema
Query	<b>cluster_id</b> <i>optional</i>	Filter results by cluster_id.	integer
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>health_state</b> <i>optional</i>		string ( <a href="#">LexicalQueryExpression</a> )

Type	Name	Description	Schema
Query	<b>ip_address</b> <i>optional</i>		string (LexicalQueryExpression)
Query	<b>is_local</b> <i>optional</i>		boolean
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>		enum (ok, unknown, degraded, transitioning, isolated)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>top_level_assembly</b> <i>optional</i>		string (LexicalQueryExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of clusters <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< Cluster > array

### 3.6.2. Return a Cluster matching the provided name

```
GET /clusters/{cluster_name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single Cluster	<a href="#">Cluster</a>

## Example HTTP response

### Response 200

```
{
  "name" : "cluster-1",
  "cluster_id" : 1,
  "island_id" : 1,
  "allow_auto_join" : true,
  "connected" : true,
  "top_level_assembly" : "FNM00123456789",
  "operational_status" : "ok",
  "transition_indications" : [ ],
  "transition_progress" : [ ],
  "health_state" : "ok",
  "health_indications" : [ ],
  "system_time" : "Mon Nov 19 22:59:37 UTC 2018",
  "ip_address" : "10.6.209.205",
  "is_local" : true
}
```

## 3.6.3. Update attributes of a cluster

```
PATCH /clusters/{cluster_name}
```

### Description

Settable attributes are 'name' and 'allow\_auto\_join'

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>cluster_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated Cluster	<a href="#">Cluster</a>

## Example HTTP response

### Response 200

```
{
  "name" : "cluster-1",
  "cluster_id" : 1,
  "island_id" : 1,
  "allow_auto_join" : true,
  "connected" : true,
  "top_level_assembly" : "FNM00123456789",
  "operational_status" : "ok",
  "transition_indications" : [ ],
  "transition_progress" : [ ],
  "health_state" : "ok",
  "health_indications" : [ ],
  "system_time" : "Mon Nov 19 22:59:37 UTC 2018",
  "ip_address" : "10.6.209.205",
  "is_local" : true
}
```

## 3.7. Consistency\_group

### 3.7.1. Create a new ConsistencyGroup

```
POST /clusters/{cluster_name}/consistency_groups
```

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>consistency_group_payload</b> <i>required</i>		<a href="#">consistency_group_payload</a>



## Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created ConsistencyGroup.	<a href="#">ConsistencyGroup</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created ConsistencyGroup.	No Content

## Example HTTP response

### Response 201

```
{
  "name" : "Test_CG",
  "operational_status" : [ {
    "cluster" : "/vplex/v2/clusters/cluster-1",
    "summary" : "ok",
    "details" : [ ]
  } ],
  "read_only" : false,
  "virtual_volumes" : [ "/vplex/v2/clusters/virtual_volumes/vvol1",
"/vplex/v2/clusters/virtual_volumes/vvol2" ]
}
```

## 3.7.2. Returns a list of ConsistencyGroups

```
GET /clusters/{cluster_name}/consistency_groups
```

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.<b>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

Type	Name	Description	Schema
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of consistency groups <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">ConsistencyGroup</a> > array

## Produces

- `application/json`

### 3.7.3. Returns a single ConsistencyGroup object

```
GET /clusters/{cluster_name}/consistency_groups/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single ConsistencyGroup	<a href="#">ConsistencyGroup</a>

## Example HTTP response

### Response 200

```
{
  "name" : "Test_CG",
  "operational_status" : [ {
    "cluster" : "/vplex/v2/clusters/cluster-1",
    "summary" : "ok",
    "details" : [ ]
  } ],
  "read_only" : false,
  "virtual_volumes" : [ "/vplex/v2/clusters/virtual_volumes/vvol1",
"/vplex/v2/clusters/virtual_volumes/vvol2" ]
}
```

### 3.7.4. Deletes a single ConsistencyGroup

```
DELETE /clusters/{cluster_name}/consistency_groups/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.7.5. Update attributes on a ConsistencyGroup

```
PATCH /clusters/{cluster_name}/consistency_groups/{name}
```

#### Description

Patchable attributes:

- \* detach\_rule (replace)
- \* {"type": "winner", "cluster": <cluster\_uri>, "delay": <delay\_in\_seconds>}
- \* {"type": "no\_automatic\_winner"}
- \* name (replace)

- \* storage\_at\_clusters (add/remove)
- \* virtual\_volumes (add/remove)
- \* visibility (add/remove)

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>consistency_group_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated ConsistencyGroup	<a href="#">ConsistencyGroup</a>

## Example HTTP response

### Response 200

```
{
  "name" : "Test_CG",
  "operational_status" : [ {
    "cluster" : "/vplex/v2/clusters/cluster-1",
    "summary" : "ok",
    "details" : [ ]
  } ],
  "read_only" : false,
  "virtual_volumes" : [ "/vplex/v2/clusters/virtual_volumes/vvol1",
"/vplex/v2/clusters/virtual_volumes/vvol2" ]
}
```

## 3.8. Data\_migration

### 3.8.1. Create a new DeviceMigration

```
POST /data_migrations/device_migrations
```

## Parameters

Type	Name	Schema
Body	<b>device_migration_payload</b> <i>required</i>	<a href="#">device_migration_payload</a>

## Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created DeviceMigration.	<a href="#">DeviceMigration</a>

## Example HTTP response

### Response 201

```
{
  "name" : "D_dev_1_dev_2",
  "from_cluster" : "/vplex/v2/clusters/cluster-1",
  "percentage_done" : 3,
  "source" : "/vplex/v2/clusters/cluster-1/devices/dev_1",
  "start_time" : "Thu Oct 25 22:03:46 UTC 2018",
  "status" : "in-progress",
  "target" : "/vplex/v2/clusters/cluster-1/devices/dev_2",
  "to_cluster" : "/vplex/v2/clusters/cluster-1",
  "transfer_size" : 131072,
  "type" : "full",
  "source_exported" : false,
  "target_exported" : false
}
```

## 3.8.2. Returns a list of device migrations

```
GET /data_migrations/device_migrations
```

## Parameters

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>from_cluster</b> <i>optional</i>	Filter results by from_cluster. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )

Type	Name	Description	Schema
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>to_cluster</b> <i>optional</i>	Filter results by to_cluster. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of device migrations <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">DeviceMigration</a> > array

### 3.8.3. Returns a single DeviceMigration object

```
GET /data_migrations/device_migrations/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single DeviceMigration object	<a href="#">DeviceMigration</a>

## Example HTTP response

### Response 200

```
{
  "name" : "D_dev_1_dev_2",
  "from_cluster" : "/vplex/v2/clusters/cluster-1",
  "percentage_done" : 3,
  "source" : "/vplex/v2/clusters/cluster-1/devices/dev_1",
  "start_time" : "Thu Oct 25 22:03:46 UTC 2018",
  "status" : "in-progress",
  "target" : "/vplex/v2/clusters/cluster-1/devices/dev_2",
  "to_cluster" : "/vplex/v2/clusters/cluster-1",
  "transfer_size" : 131072,
  "type" : "full",
  "source_exported" : false,
  "target_exported" : false
}
```

### 3.8.4. Deletes a single canceled or committed DeviceMigration

```
DELETE /data_migrations/device_migrations/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.8.5. Update attributes on a DeviceMigration

```
PATCH /data_migrations/device_migrations/{name}
```

#### Description

Settable attributes: 'name', 'transfer\_size' and 'status'(replace)

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>device_migration_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated DeviceMigration	<a href="#">DeviceMigration</a>

## Example HTTP response

### Response 200

```
{
  "name" : "D_dev_1_dev_2",
  "from_cluster" : "/vplex/v2/clusters/cluster-1",
  "percentage_done" : 3,
  "source" : "/vplex/v2/clusters/cluster-1/devices/dev_1",
  "start_time" : "Thu Oct 25 22:03:46 UTC 2018",
  "status" : "in-progress",
  "target" : "/vplex/v2/clusters/cluster-1/devices/dev_2",
  "to_cluster" : "/vplex/v2/clusters/cluster-1",
  "transfer_size" : 131072,
  "type" : "full",
  "source_exported" : false,
  "target_exported" : false
}
```

## 3.8.6. Create a new ExtentMigration

```
POST /data_migrations/extent_migrations
```

### Parameters

Type	Name	Schema
Body	<b>extent_migration_payload</b> <i>required</i>	<a href="#">extent_migration_payload</a>

### Responses



HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created DeviceMigration.	<a href="#">ExtentMigration</a>

### Example HTTP response

#### Response 201

```
{
  "name" : "E_6bb8a76_1_6bb8a6a_1",
  "from_cluster" : "/vplex/v2/clusters/cluster-1",
  "percentage_done" : 15,
  "source" : "/vplex/v2/clusters/cluster-1/extents/extent_VPD83T3_60001440000001001d1794456bb8a76_1",
  "start_time" : "Mon Jan 21 23:25:35 UTC 2019",
  "status" : "in-progress",
  "target" : "/vplex/v2/clusters/cluster-1/extents/extent_VPD83T3_60001440000001001d1794456bb8a6a_1",
  "to_cluster" : "/vplex/v2/clusters/cluster-1",
  "transfer_size" : 131072,
  "type" : "full"
}
```

### 3.8.7. Returns a list of extent migrations

```
GET /data_migrations/extent_migrations
```

#### Parameters

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string (FieldSelectionExpression)
Query	<b>from_cluster</b> <i>optional</i>	Filter results by from_cluster. See <a href="#">LexicalQueryExpression</a> for details.	string (LexicalQueryExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See <a href="#">LexicalQueryExpression</a> for details.	string (LexicalQueryExpression)

Type	Name	Description	Schema
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <a href="#">SortingOrderExpression</a> for details.	string ( <a href="#">SortingOrderExpression</a> )
Query	<b>to_cluster</b> <i>optional</i>	Filter results by to_cluster. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )

## Responses

HTTP Code	Description	Schema
200	A JSON array of extent migrations <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">ExtentMigration</a> > array

### 3.8.8. Returns a single ExtentMigration object

```
GET /data_migrations/extent_migrations/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )

## Responses

HTTP Code	Description	Schema
200	A single ExtentMigration object	<a href="#">ExtentMigration</a>

## Example HTTP response

### Response 200

```
{
  "name" : "E_6bb8a76_1_6bb8a6a_1",
  "from_cluster" : "/vplex/v2/clusters/cluster-1",
  "percentage_done" : 15,
  "source" : "/vplex/v2/clusters/cluster-
1/extents/extent_VPD83T3_60001440000001001d1794456bb8a76_1",
  "start_time" : "Mon Jan 21 23:25:35 UTC 2019",
  "status" : "in-progress",
  "target" : "/vplex/v2/clusters/cluster-
1/extents/extent_VPD83T3_60001440000001001d1794456bb8a6a_1",
  "to_cluster" : "/vplex/v2/clusters/cluster-1",
  "transfer_size" : 131072,
  "type" : "full"
}
```

### 3.8.9. Deletes a single canceled or committed ExtentMigration

```
DELETE /data_migrations/extent_migrations/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.8.10. Update attributes on a ExtentMigration

```
PATCH /data_migrations/extent_migrations/{name}
```

#### Description

Settable attributes: 'name', 'transfer\_size' and 'status'(replace)

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

Type	Name	Description	Schema
Body	<b>extent_migration_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated ExtentMigration	<a href="#">ExtentMigration</a>

## Example HTTP response

### Response 200

```
{
  "name" : "E_6bb8a76_1_6bb8a6a_1",
  "from_cluster" : "/vplex/v2/clusters/cluster-1",
  "percentage_done" : 15,
  "source" : "/vplex/v2/clusters/cluster-1/
  extents/extent_VPD83T3_600014400000001001d1794456bb8a76_1",
  "start_time" : "Mon Jan 21 23:25:35 UTC 2019",
  "status" : "in-progress",
  "target" : "/vplex/v2/clusters/cluster-1/
  extents/extent_VPD83T3_600014400000001001d1794456bb8a6a_1",
  "to_cluster" : "/vplex/v2/clusters/cluster-1",
  "transfer_size" : 131072,
  "type" : "full"
}
```

## 3.9. Devices

### 3.9.1. Create a new Device

```
POST /clusters/{cluster_name}/devices
```

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>device_payload</b> <i>required</i>		<a href="#">device_payload</a>

## Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created LocalDevice.	<a href="#">Device</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created LocalDevice.	No Content

### 3.9.2. Returns a list of Device objects

```
GET /clusters/{cluster_name}/devices
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>capacity</b> <i>optional</i>	Filter results by capacity. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

Type	Name	Description	Schema
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>thin_capable</b> <i>optional</i>	Filter results by thin_capable. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>top_level</b> <i>optional</i>	Filter results by top_level.	boolean
Query	<b>virtual_volume</b> <i>optional</i>	Filter results by virtual_volume. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>visibility</b> <i>optional</i>	Filter results by visibility. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

## Responses

HTTP Code	Description	Schema
200	A list of Device objects <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">Device</a> > array

### 3.9.3. Returns a single Device object

```
GET /clusters/{cluster_name}/devices/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single Device object	<a href="#">Device</a>

### 3.9.4. Deletes a single Device

```
DELETE /clusters/{cluster_name}/devices/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.9.5. Update attributes of a local device

```
PATCH /clusters/{cluster_name}/devices/{name}
```

## Description

Patchable operations:

- \* name
- \* transfer\_size
- \* attach\_operation\_payload
- \* {"op": "add", "path": "/legs", "value": <device\_uri>}

- \* {"op": "add", "path": "/legs", "value": <extent\_uri>}
- \* detach\_operation\_payload
- \* {"op": "remove", "path": "/legs", "value": <device\_uri>}
- \* {"op": "remove", "path": "/legs", "value": <extent\_uri>}

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>		string
Body	<b>local_device_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

### Responses

HTTP Code	Description	Schema
200	The updated local device	<a href="#">Device</a>

## 3.10. Director

### 3.10.1. Returns a list of the available directors

```
GET /directors
```

### Parameters

Type	Name	Description	Schema
Query	<b>cluster_id</b> <i>optional</i>	Filter results by cluster_id.	integer
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)



Type	Name	Description	Schema
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of directors <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">Director</a> > array

### 3.10.2. Return a Director matching the provided name

```
GET /directors/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single Director	<a href="#">Director</a>

## Example HTTP response

### Response 200

```

{
  "auto_boot" : true,
  "auto_restart" : true,
  "cluster_id" : 1,
  "communication_status" : "ok",
  "director_count" : 2,
  "director_id" : 16857344,
  "director_type" : "Vplex",
  "engine_id" : "1-1",
  "firmware_uptime" : 1220711,
  "health_indications" : [ ],
  "health_state" : "ok",
  "hostname" : "128.221.252.35",
  "name" : "director-1-1-A",
  "operational_status" : "ok",
  "os_uptime" : 1487715,
  "port" : 5988,
  "serial_number" : "CF2HW150600003",
  "system_time" : "Mon Nov 19 22:59:37 UTC 2018",
  "temperature_threshold_exceeded" : false,
  "voltage_threshold_exceeded" : false
}

```

## 3.11. Director\_ports

### 3.11.1. Returns a list of director ports

```
GET /directors/{director_name}/ports
```

#### Parameters

Type	Name	Description	Schema
Path	<b>director_name</b> <i>required</i>	The name of the director	string

#### Responses

HTTP Code	Description	Schema
200	A JSON array of director ports <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">DirectorPort</a> > array

### 3.11.2. Returns a single DirectorPort object

```
GET /directors/{director_name}/ports/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>director_name</b> <i>required</i>	The name of the director	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	A single DirectorPort	<a href="#">DirectorPort</a>
500	Failed to get DirectorPort	<a href="#">Error</a>

### 3.11.3. Update attributes on a DirectorPort

```
PATCH /directors/{director_name}/ports/{name}
```

#### Description

Settable attribute is 'enabled'

#### Parameters

Type	Name	Description	Schema
Path	<b>director_name</b> <i>required</i>	The name of the director	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>port_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

#### Responses

HTTP Code	Description	Schema
200	The updated DirectorPort	<a href="#">DirectorPort</a>

## 3.12. Distributed\_storage

### 3.12.1. Create a new distributed ConsistencyGroup

POST /distributed\_storage/distributed\_consistency\_groups

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Body	<b>distributed_consistency_group_payload</b> <i>required</i>		<a href="#">distributed_consistency_group_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created distributed ConsistencyGroup.	<a href="#">ConsistencyGroup</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created distributed ConsistencyGroup.	No Content

#### Example HTTP response

##### Response 201

```

{
  "name" : "Test_CG",
  "operational_status" : [ {
    "cluster" : "/vplex/v2/clusters/cluster-1",
    "summary" : "ok",
    "details" : [ ]
  } ],
  "read_only" : false,
  "virtual_volumes" : [ "/vplex/v2/clusters/virtual_volumes/vvol1",
"/vplex/v2/clusters/virtual_volumes/vvol2" ]
}

```

### 3.12.2. Returns a list of distributed ConsistencyGroups

GET /distributed\_storage/distributed\_consistency\_groups

#### Parameters

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

#### Responses

HTTP Code	Description	Schema
200	A JSON array of distributed consistency groups	< <a href="#">ConsistencyGroup</a> > array

### 3.12.3. Returns a single distributed ConsistencyGroup object

```
GET /distributed_storage/distributed_consistency_groups/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	A single distributed ConsistencyGroup	<a href="#">ConsistencyGroup</a>

#### Example HTTP response

##### Response 200

```
{
  "name" : "Test_CG",
  "operational_status" : [ {
    "cluster" : "/vplex/v2/clusters/cluster-1",
    "summary" : "ok",
    "details" : [ ]
  } ],
  "read_only" : false,
  "virtual_volumes" : [ "/vplex/v2/clusters/virtual_volumes/vvol1",
"/vplex/v2/clusters/virtual_volumes/vvol2" ]
}
```

### 3.12.4. Deletes a single distributed ConsistencyGroup

```
DELETE /distributed_storage/distributed_consistency_groups/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.12.5. Update attributes on a distributed ConsistencyGroup

```
PATCH /distributed_storage/distributed_consistency_groups/{name}
```

#### Description

Patchable attributes are 'storage\_at\_clusters' (add/remove), 'virtual\_volumes' (add/remove), 'visibility' (add/remove), 'name', 'auto\_resume\_at\_loser' and 'detach\_rule'

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>distributed_consistency_group_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

#### Responses

HTTP Code	Description	Schema
200	The updated distributed ConsistencyGroup	<a href="#">ConsistencyGroup</a>

#### Example HTTP response

##### Response 200

```
{
  "name" : "Test_CG",
  "operational_status" : [ {
    "cluster" : "/vplex/v2/clusters/cluster-1",
    "summary" : "ok",
    "details" : [ ]
  } ],
  "read_only" : false,
  "virtual_volumes" : [ "/vplex/v2/clusters/virtual_volumes/vvol1",
"/vplex/v2/clusters/virtual_volumes/vvol2" ]
}
```

**3.12.6. Manually resume I/O to the virtual-volumes in a distributed consistency group.** In a cluster-partition scenario where the ruleset does not indicate an automatic winner, this endpoint will select the winning cluster where I/O should continue. After a cluster-partition is resolved, in the case that auto-resume-at-loser is set to false, this endpoint will resume I/O on the losing cluster.

```
POST /distributed_storage/distributed_consistency_groups/{name}/resume
```

### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>cg_resume_payload</b> <i>required</i>		<a href="#">cg_resume_payload</a>

### Responses

HTTP Code	Description	Schema
200	A JSON array of distributed consistency groups	<a href="#">ConsistencyGroup</a>

### Produces

- `application/json`

### Example HTTP response

#### Response 200

```
{
  "name" : "Test_CG",
  "operational_status" : [ {
    "cluster" : "/vplex/v2/clusters/cluster-1",
    "summary" : "ok",
    "details" : [ ]
  } ],
  "read_only" : false,
  "virtual_volumes" : [ "/vplex/v2/clusters/virtual_volumes/vvol1",
"/vplex/v2/clusters/virtual_volumes/vvol2" ]
}
```



### 3.12.7. Create a new DistributedDevice

POST /distributed\_storage/distributed\_devices

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Body	<b>distributed_device_payload</b> <i>required</i>		<a href="#">distributed_device_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created DistributedDevice.	<a href="#">DistributedDevice</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created DistributedDevice.	No Content

### 3.12.8. Returns a list of DistributedDevices

GET /distributed\_storage/distributed\_devices

#### Parameters

Type	Name	Description	Schema
Query	<b>capacity</b> <i>optional</i>	Filter results by capacity. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

Type	Name	Description	Schema
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by <code>operational_status</code> . See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <code>SortingOrderExpression</code> for details.	string ( <code>SortingOrderExpression</code> )
Query	<b>thin_capable</b> <i>optional</i>	Filter results by <code>thin_capable</code> . See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )

## Responses

HTTP Code	Description	Schema
200	A JSON array of distributed devices <b>Headers :</b> <code>X-Total-Count</code> (integer) : The total number of entities in the result set after filtering.	< <code>DistributedDevice</code> > array

## Produces

- `application/json`

### 3.12.9. Returns a single `DistributedDevice` object

```
GET /distributed_storage/distributed_devices/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <code>FieldSelectionExpression</code> for details.	string ( <code>FieldSelectionExpression</code> )

## Responses

HTTP Code	Description	Schema
200	A single DistributedDevice	<a href="#">DistributedDevice</a>

### 3.12.10. Deletes a single DistributedDevice

```
DELETE /distributed_storage/distributed_devices/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.12.11. Update attributes on a DistributedDevice

```
PATCH /distributed_storage/distributed_devices/{name}
```

#### Description

Settable attributes: 'name', 'legs', 'transfer\_size', 'rule\_set\_name'

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>distributed_device_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

#### Responses

HTTP Code	Description	Schema
200	The updated DistributedDevice	<a href="#">DistributedDevice</a>

### 3.12.12. Manually resume I/O to a distributed device that supports a distributed virtual-volume.

```
POST /distributed_storage/distributed_devices/{name}/resume
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	A distributed device object	<a href="#">DistributedDevice</a>

#### Produces

- `application/json`

### 3.12.13. Create a new distributed VirtualVolume

```
POST /distributed_storage/distributed_virtual_volumes
```

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Body	<b>distributed_virtual_volume_payload</b> <i>required</i>		<a href="#">distributed_virtual_volume_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created distributed VirtualVolume.	<a href="#">VirtualVolume</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created distributed VirtualVolume.	No Content

### Example HTTP response

#### Response 201

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

### 3.12.14. Returns a list of distributed VirtualVolumes

```
GET /distributed_storage/distributed_virtual_volumes
```

#### Parameters

Type	Name	Description	Schema
Query	<b>capacity</b> <i>optional</i>	Filter results by capacity. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>consistency_group</b> <i>optional</i>	Filter results by consistency_group. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

Type	Name	Description	Schema
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>service_status</b> <i>optional</i>	Filter results by service_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>thin_enabled</b> <i>optional</i>	Filter results by thin_enabled. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of distributed virtual volumes	< <a href="#">VirtualVolume</a> > array

### 3.12.15. Returns a single distributed VirtualVolume object

```
GET /distributed_storage/distributed_virtual_volumes/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
200	A single distributed VirtualVolume	<a href="#">VirtualVolume</a>

### Example HTTP response

#### Response 200

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

### 3.12.16. Deletes a single distributed VirtualVolume

```
DELETE /distributed_storage/distributed_virtual_volumes/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.12.17. Update attributes on a distributed VirtualVolume

```
PATCH /distributed_storage/distributed_virtual_volumes/{name}
```

## Description

Settable attributes: 'name'

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>distributed_virtual_volume_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated distributed VirtualVolume	<a href="#">VirtualVolume</a>

## Example HTTP response

### Response 200

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

## 3.12.18. Expand the capacity of a distributed VirtualVolume



POST /distributed\_storage/distributed\_virtual\_volumes/{name}/expand

### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>distributed_virtual_volume_expand_payload</b> <i>required</i>		<a href="#">distributed_virtual_volume_expand_payload</a>

### Responses

HTTP Code	Description	Schema
200	Updated distributed VirtualVolume	<a href="#">VirtualVolume</a>

### Example HTTP response

#### Response 200

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

### 3.12.19. Returns a list of RuleSets

GET /distributed\_storage/rule\_sets

## Parameters

Type	Name	Description	Schema
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)

## Responses

HTTP Code	Description	Schema
200	A JSON array of rule sets	< <a href="#">RuleSet</a> > array

## Produces

- `application/json`

### 3.12.20. Returns a single RuleSet object

```
GET /distributed_storage/rule_sets/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
200	A single RuleSet	<a href="#">RuleSet</a>

## 3.13. Engine

### 3.13.1. Returns a list of the available engines

```
GET /engines/
```

## Parameters

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of engines <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">Engine</a> > array

### 3.13.2. Return a Engine matching the provided name

```
GET /engines/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single Engine	<a href="#">Engine</a>

### Example HTTP response

#### Response 200

```
{
  "cluster_ip_seed" : 1,
  "enclosure_id" : 1,
  "engine_id" : "1-1",
  "engine_family" : "VPL",
  "health_indications" : [ ],
  "health_state" : "major-failure",
  "marker_led" : false,
  "operational_status" : "online",
  "part_number" : "303-094-001B",
  "revision_number" : "B01",
  "serial_number" : "CF2G6110200066",
  "top_level_assembly" : "FNM00111600426",
  "wnn_seed" : "46e03e04",
  "name" : "engine-1-1"
}
```

## 3.14. Events

### 3.14.1. Generate Events from different clients to Notification Server.

```
POST /event/
```

#### Parameters

Type	Name	Schema
Body	<b>events_payload</b> <i>required</i>	<a href="#">events_payload</a>

#### Responses

HTTP Code	Description	Schema
204	The event has been successfully generated.	No Content
400	The request has failed. Please look into logs.	No Content

## 3.15. Exports

### 3.15.1. Registers an InitiatorPort

```
POST /clusters/{cluster_name}/exports/initiator_ports
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>register_payload</b> <i>required</i>		<a href="#">register_payload</a>

#### Responses

HTTP Code	Description	Schema
201	The registration was successful, return registered InitiatorPort	<a href="#">InitiatorPort</a>

### 3.15.2. Returns a list of InitiatorPort objects

```
GET /clusters/{cluster_name}/exports/initiator_ports
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)

Type	Name	Description	Schema
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <code>SortingOrderExpression</code> for details.	string ( <code>SortingOrderExpression</code> )
Query	<b>type</b> <i>optional</i>	Filter results by type. See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )

## Responses

HTTP Code	Description	Schema
200	A list of <code>InitiatorPort</code> objects <b>Headers :</b> <code>X-Total-Count</code> (integer) : The total number of entities in the result set after filtering.	< <a href="#">InitiatorPort</a> > array

### 3.15.3. Rediscover initiator ports

```
POST /clusters/{cluster_name}/exports/initiator_ports/rediscover
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>rediscover_payload</b> <i>optional</i>		<a href="#">rediscover_payload</a>

## Responses

HTTP Code	Description	Schema
200	A list of <code>InitiatorPort</code> objects	< <a href="#">InitiatorPort</a> > array

### 3.15.4. Returns a single InitiatorPort object

```
GET /clusters/{cluster_name}/exports/initiator_ports/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single InitiatorPort	<a href="#">InitiatorPort</a>

### 3.15.5. Unregister an InitiatorPort

```
DELETE /clusters/{cluster_name}/exports/initiator_ports/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
204	The un-registration was successful	No Content

### 3.15.6. Update attributes on an InitiatorPort

```
PATCH /clusters/{cluster_name}/exports/initiator_ports/{name}
```

## Description

Settable attributes: 'name','iops\_limit','bandwidth\_limit'

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>initiator_port_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated InitiatorPort	<a href="#">InitiatorPort</a>

### 3.15.7. Returns a list of Port objects

```
GET /clusters/{cluster_name}/exports/ports
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>port_name</b> <i>optional</i>	Filter results by port_name. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <a href="#">SortingOrderExpression</a> for details.	string ( <a href="#">SortingOrderExpression</a> )



## Responses

HTTP Code	Description	Schema
200	A list of Port objects	< <a href="#">Port</a> > array

### 3.15.8. Returns a single Port object

```
GET /clusters/{cluster_name}/exports/ports/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
200	A single Port	<a href="#">Port</a>

### 3.15.9. Update attributes on a Port

```
PATCH /clusters/{cluster_name}/exports/ports/{name}
```

## Description

Settable attributes are 'name' and 'enabled'

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>port_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated Port	<a href="#">Port</a>

### 3.15.10. Create a new StorageView

```
POST /clusters/{cluster_name}/exports/storage_views
```

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>storage_view_payload</b> <i>required</i>		<a href="#">storage_view_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created StorageView.	<a href="#">StorageView</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created StorageView.	No Content

### 3.15.11. Returns a list of StorageView objects

```
GET /clusters/{cluster_name}/exports/storage_views
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	A list of StorageView objects	< <a href="#">StorageView</a> > array

### 3.15.12. Returns a single StorageView

```
GET /clusters/{cluster_name}/exports/storage_views/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
200	A single StorageView	<a href="#">StorageView</a>

### 3.15.13. Deletes a single StorageView

```
DELETE /clusters/{cluster_name}/exports/storage_views/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>		string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.15.14. Update attributes on a StorageView

```
PATCH /clusters/{cluster_name}/exports/storage_views/{name}
```

#### Description

Settable attributes: 'name', 'initiators'(add/remove), 'virtual\_volumes'(add/remove), 'ports'(add/remove)

#### Parameters

Type	Name	Description	Schema
Header	<b>allow-multi-fail</b> <i>optional</i>		boolean
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>storage_view_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated StorageView	<a href="#">StorageView</a>

## 3.16. Extent

### 3.16.1. Create a new Extent

```
POST /clusters/{cluster_name}/extents
```

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>extent_payload</b> <i>required</i>		<a href="#">extent_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created Extent.	<a href="#">Extent</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created Extent.	No Content

#### Example HTTP response

##### Response 201

```

{
  "application-consistent" : false,
  "block-count" : 38656,
  "block-offset" : 0,
  "block-size" : "4K",
  "capacity" : "151M",
  "health-indications" : [ ],
  "health-state" : "ok",
  "io-status" : "alive",
  "itls" : [ "0x500014426012c510/0x5006016447e002c5/0x01a7",
"0x500014426012c510/0x5006016547e002c5/0x01a7",
"0x500014426012c511/0x5006016447e002c5/0x01a7",
"0x500014426012c511/0x5006016547e002c5/0x01a7" ],
  "locality" : "test_local",
  "operational-status" : "ok",
  "storage-array-family" : "xtremio",
  "storage-volume" : "VPD83T3:514f0c5e61803e72",
  "storage-volumetype" : "normal",
  "system-id" : "SLICE:e025d86e8d44bdb0",
  "thin-capable" : true,
  "underlying-storage-block-size" : 512,
  "use" : "used",
  "used-by" : [ "device_thin_attri_20180818154928680985_c1" ],
  "vendor-specific-name" : "XtremIO"
}

```

### 3.16.2. Returns a list of Extent objects

```
GET /clusters/{cluster_name}/extents
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>capacity</b> <i>optional</i>	Filter results by capacity. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.<b>	integer (int32)

Type	Name	Description	Schema
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results. <b>'limit'</b> must also be specified.	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>use</b> <i>optional</i>	Filter results by use. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

## Responses

HTTP Code	Description	Schema
200	A list of Extent objects <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< Extent > array

### 3.16.3. Returns a single Extent object

```
GET /clusters/{cluster_name}/extents/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single Extent object	Extent

## Example HTTP response

### Response 200

```
{
  "application-consistent" : false,
  "block-count" : 38656,
  "block-offset" : 0,
  "block-size" : "4K",
  "capacity" : "151M",
  "health-indications" : [ ],
  "health-state" : "ok",
  "io-status" : "alive",
  "itls" : [ "0x500014426012c510/0x5006016447e002c5/0x01a7",
"0x500014426012c510/0x5006016547e002c5/0x01a7",
"0x500014426012c511/0x5006016447e002c5/0x01a7",
"0x500014426012c511/0x5006016547e002c5/0x01a7" ],
  "locality" : "test_local",
  "operational-status" : "ok",
  "storage-array-family" : "xtremio",
  "storage-volume" : "VPD83T3:514f0c5e61803e72",
  "storage-volumetype" : "normal",
  "system-id" : "SLICE:e025d86e8d44bdb0",
  "thin-capable" : true,
  "underlying-storage-block-size" : 512,
  "use" : "used",
  "used-by" : [ "device_thin_attri_20180818154928680985_c1" ],
  "vendor-specific-name" : "XtremIO"
}
```

### 3.16.4. Deletes a single Extent object

```
DELETE /clusters/{cluster_name}/extents/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content



### 3.16.5. Update attributes on a Extent

```
PATCH /clusters/{cluster_name}/extents/{name}
```

#### Description

Settable attributes: 'name'

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>extent_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

#### Responses

HTTP Code	Description	Schema
200	The updated Extent	<a href="#">Extent</a>

#### Example HTTP response

##### Response 200

```

{
  "application-consistent" : false,
  "block-count" : 38656,
  "block-offset" : 0,
  "block-size" : "4K",
  "capacity" : "151M",
  "health-indications" : [ ],
  "health-state" : "ok",
  "io-status" : "alive",
  "itls" : [ "0x500014426012c510/0x5006016447e002c5/0x01a7",
"0x500014426012c510/0x5006016547e002c5/0x01a7",
"0x500014426012c511/0x5006016447e002c5/0x01a7",
"0x500014426012c511/0x5006016547e002c5/0x01a7" ],
  "locality" : "test_local",
  "operational-status" : "ok",
  "storage-array-family" : "xtremio",
  "storage-volume" : "VPD83T3:514f0c5e61803e72",
  "storage-volumetype" : "normal",
  "system-id" : "SLICE:e025d86e8d44bdb0",
  "thin-capable" : true,
  "underlying-storage-block-size" : 512,
  "use" : "used",
  "used-by" : [ "device_thin_attri_20180818154928680985_c1" ],
  "vendor-specific-name" : "XtremIO"
}

```

## 3.17. Hardware\_ports

### 3.17.1. Returns a list of hardware ports

GET /hardware/ports

**CAUTION** operation.deprecated

#### Parameters

Type	Name	Description	Schema
Query	<b>director</b> <i>optional</i>	Filter results by director. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.<b>	integer (int32)

Type	Name	Description	Schema
Query	<b>name</b> <i>optional</i>	Filter results by name. See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results. <code>&lt;b&gt;'limit' must also be specified.&lt;/b&gt;</code>	integer (int32)
Query	<b>role</b> <i>optional</i>	Filter results by role. See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <code>SortingOrderExpression</code> for details.	string ( <code>SortingOrderExpression</code> )
Query	<b>status</b> <i>optional</i>	Filter results by status. See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )

## Responses

HTTP Code	Description	Schema
200	A JSON array of hardware ports <b>Headers :</b> <code>X-Total-Count</code> (integer) : The total number of entities in the result set after filtering.	<a href="#">HardwarePorts</a>
500	Failed to get hardware ports	<a href="#">Error</a>

## 3.18. Health

### 3.18.1. Return local-COM health information

```
GET /clusters/{cluster_name}/health/local_com
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

#### Responses

HTTP Code	Description	Schema
200	The local-COM health object	<a href="#">LocalComHealth</a>

HTTP Code	Description	Schema
500	When health information cannot be obtained	<a href="#">Error</a>

### Example HTTP response

#### Response 200

```
{
  "status" : "full,",
  "details" : [ "ip-port-group-0 - OK - All expected connectivity is present.", "ip-port-group-1 - OK - All expected connectivity is present." ]
}
```

## 3.18.2. Return WAN-COM health information

```
GET /health/wan_com
```

### Responses

HTTP Code	Description	Schema
200	The WAN-COM health object	<a href="#">WanComHealth</a>
500	When health information cannot be obtained	<a href="#">Error</a>

### Example HTTP response

#### Response 200

```
{
  "status" : "full,",
  "details" : [ "ip-port-group-0 - OK - All expected connectivity is present.", "ip-port-group-1 - OK - All expected connectivity is present." ]
}
```

## 3.19. Jobs

### 3.19.1. Create a VIAS provisioning job

```
POST /jobs
```

## Parameters

Type	Name	Schema
Body	<b>vias_payload</b> <i>required</i>	<a href="#">vias_payload</a>

## Responses

HTTP Code	Description	Schema
201	VIAS provisioning job created <b>Headers :</b> <b>Location</b> (string) : The uri of the created job.	<a href="#">ViasJob</a>

### 3.19.2. Get all the current VIAS provisioning jobs

GET /jobs

## Parameters

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <a href="#">SortingOrderExpression</a> for details.	string ( <a href="#">SortingOrderExpression</a> )
Query	<b>status</b> <i>optional</i>	Filter results by status. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )

## Responses

HTTP Code	Description	Schema
200	A JSON array of VIAS jobs <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">ViasJob</a> > array

### 3.19.3. Get the status of a VIAS provisioning job

```
GET /jobs/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )

#### Responses

HTTP Code	Description	Schema
200	The current status information of the job.	<a href="#">ViasJob</a>

### 3.19.4. Delete a VIAS provisioning jobs

```
DELETE /jobs/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Successfully deleted.	No Content

### 3.19.5. Cancel a vias provisioning job

```
POST /jobs/{name}/cancel
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	VIAS job was cancelled successfully, return updated ViasJob	<a href="#">ViasJob</a>

### 3.19.6. Resubmit a vias provisioning job

```
POST /jobs/{name}/resubmit
```

#### Parameters

Type	Name	Description	Schema
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	VIAS job was resubmitted successfully, return updated ViasJob	<a href="#">ViasJob</a>

## 3.20. Licenses

### 3.20.1. Install a new license file

```
POST /clusters/{cluster_name}/licenses
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

Type	Name	Description	Schema
Query	<b>validate</b> <i>optional</i>		boolean
Body	<b>license_payload</b> <i>required</i>		<a href="#">license_payload</a>

## Responses

HTTP Code	Description	Schema
201	Created	No Content
500	Invalid license file	<a href="#">Error</a>

## Consumes

- `application/json`

### 3.20.2. Returns a list of installed licenses on the setup

```
GET /clusters/{cluster_name}/licenses
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <a href="#">SortingOrderExpression</a> for details.	string ( <a href="#">SortingOrderExpression</a> )

## Responses



HTTP Code	Description	Schema
200	A JSON array of licenses <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	<a href="#">LicenseArray</a>
500	License file could not be retrieved from lockbox	<a href="#">Error</a>

### 3.20.3. Deletes the licenses

```
DELETE /clusters/{cluster_name}/licenses
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

#### Responses

HTTP Code	Description	Schema
202	Deletion of license completed	No Content
404	The specified resource was not found	<a href="#">Error</a>

### 3.20.4. Validate a license file

```
POST /clusters/{cluster_name}/licenses/validate
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>validate_payload</b> <i>required</i>		<a href="#">validate_payload</a>

#### Responses

HTTP Code	Description	Schema
200	The validation was successful, return license features.	No Content

HTTP Code	Description	Schema
500	Invalid license file.	No Content

## 3.21. Logger

**3.21.1. Log information on the server. This endpoint is intended for internal system use only.**

POST /logger/

### Parameters

Type	Name	Schema
Body	<b>request</b> <i>required</i>	< string, object > map

### Responses

HTTP Code	Description	Schema
204	The information was successfully logged	No Content
400	The request format is not recognized by the server. Currently, only JSONLog requests are supported.	No Content

## 3.22. Logging\_volume

### 3.22.1. Creates a new Logging Volume

POST /clusters/{cluster\_name}/logging\_volumes

### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

Type	Name	Description	Schema
Body	<b>logging_volume_payload</b> <i>required</i>		logging_volume_payload

## Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created LoggingVolume.	LoggingVolume
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created LoggingVolume.	No Content

## Example HTTP response

### Response 201

```
{
  "application_consistent" : false,
  "block_count" : 5242880,
  "block_size" : 4096,
  "capacity" : 21474574336,
  "health_indications" : [ ],
  "health_state" : "ok",
  "name" : "logging_c1",
  "operational_status" : "ok",
  "storage_array_family" : "unknown",
  "system_id" : "logging_c1"
}
```

## 3.22.2. Returns a list of LoggingVolume objects. Supports paging

```
GET /clusters/{cluster_name}/logging_volumes
```

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

Type	Name	Description	Schema
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	A list of LoggingVolume objects <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">LoggingVolume</a> > array

### 3.22.3. Returns a single LoggingVolume by name

```
GET /clusters/{cluster_name}/logging_volumes/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single LoggingVolume	<a href="#">LoggingVolume</a>

### Example HTTP response

#### Response 200

```
{
  "application_consistent" : false,
  "block_count" : 5242880,
  "block_size" : 4096,
  "capacity" : 21474574336,
  "health_indications" : [ ],
  "health_state" : "ok",
  "name" : "logging_c1",
  "operational_status" : "ok",
  "storage_array_family" : "unknown",
  "system_id" : "logging_c1"
}
```

### 3.22.4. Deletes a single LoggingVolume

```
DELETE /clusters/{cluster_name}/logging_volumes/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
204	Deleted	No Content

## 3.23. Logical\_units

### 3.23.1. Returns a list of LogicalUnits

```
GET /clusters/{cluster_name}/storage_arrays/{storagearray_name}/logical_units
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>storagearray_name</b> <i>required</i>	The name of the storage array	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>storage_volume</b> <i>optional</i>	Filter results by storage_volume. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

#### Responses

HTTP Code	Description	Schema
200	A JSON array of logical units <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">LogicalUnit</a> > array

### 3.23.2. Forgets logicalUnits in an array

```
DELETE /clusters/{cluster_name}/storage_arrays/{storagearray_name}/logical_units
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>storagearray_name</b> <i>required</i>	The name of the storage array	string

## Responses

HTTP Code	Description	Schema
204	LogicalUnits are forgotten	No Content

### 3.23.3. Returns a single LogicalUnit by name

```
GET /clusters/{cluster_name}/storage_arrays/{storagearray_name}/logical_units/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Path	<b>storagearray_name</b> <i>required</i>	The name of the storage array	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single LogicalUnit	<a href="#">LogicalUnit</a>

## 3.24. Maps

### 3.24.1. Get the parents and children for the passed element

```
GET /map
```

## Parameters

Type	Name	Schema
Query	<b>uri</b> <i>required</i>	string

## Responses

HTTP Code	Description	Schema
200	A description of the parents and children of the given element. To get the complete hierarchy, make subsequent requests for the parent and children elements. This ensures that large volumes of unwanted data aren't fetched from the server, for example when viewing a large storage view, we don't want to get the complete hierarchy of every virtual volume in that view.	<a href="#">StorageMap</a>

## Example HTTP response

### Response 200

```
{
  "uri" : "/vplex/v2/clusters/cluster-1/devices/device_0",
  "parents" : [ "/vplex/v2/clusters/cluster-1/virtual_volumes/virtual_volume_0" ],
  "children" : [ "/vplex/v2/clusters/cluster-1/extents/extent_00",
"/vplex/v2/clusters/cluster-1/extents/extent_01" ]
}
```

## 3.25. Meta\_volume

### 3.25.1. Create a new MetaVolume

```
POST /clusters/{cluster_name}/meta_volumes
```

## Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string



Type	Name	Description	Schema
Body	<b>meta_volume_payload</b> <i>required</i>		<a href="#">meta_volume_payload</a>

## Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created MetaVolume.	<a href="#">MetaVolume</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created MetaVolume.	No Content

## Example HTTP response

### Response 201

```
{
  "active" : true,
  "application_consistent" : false,
  "block_count" : 20971264,
  "block_size" : 4096,
  "capacity" : 85898297344,
  "health_indications" : [ ],
  "health_state" : "ok",
  "name" : "meta_c1",
  "operational_status" : "ok",
  "storage_array_family" : "unknown",
  "system_id" : "meta_c1",
  "volume_uuid" : 1154279114901807020
}
```

## 3.25.2. Returns a list of MetaVolume objects. Supports paging

```
GET /clusters/{cluster_name}/meta_volumes
```

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	A list of MetaVolume objects <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">MetaVolume</a> > array

### 3.25.3. Returns a single MetaVolume by name

```
GET /clusters/{cluster_name}/meta_volumes/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single MetaVolume	<a href="#">MetaVolume</a>

## Example HTTP response

### Response 200

```
{
  "active" : true,
  "application_consistent" : false,
  "block_count" : 20971264,
  "block_size" : 4096,
  "capacity" : 85898297344,
  "health_indications" : [ ],
  "health_state" : "ok",
  "name" : "meta_c1",
  "operational_status" : "ok",
  "storage_array_family" : "unknown",
  "system_id" : "meta_c1",
  "volume_uuid" : 1154279114901807020
}
```

## 3.25.4. Deletes a single MetaVolume

```
DELETE /clusters/{cluster_name}/meta_volumes/{name}
```

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
204	Deleted	No Content

### 3.25.5. Update attributes on a MetaVolume

```
PATCH /clusters/{cluster_name}/meta_volumes/{name}
```

#### Description

Settable attributes: 'active' . NOTE: only true value is allowed

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>metaVolume_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

#### Responses

HTTP Code	Description	Schema
200	The updated MetaVolume	<a href="#">MetaVolume</a>
400	Invalid input - active: true expected	<a href="#">Error</a>
409	Another metadata device has already been activated.	<a href="#">Error</a>
500	Internal Server error	<a href="#">Error</a>

#### Example HTTP response

##### Response 200

```

{
  "active" : true,
  "application_consistent" : false,
  "block_count" : 20971264,
  "block_size" : 4096,
  "capacity" : 85898297344,
  "health_indications" : [ ],
  "health_state" : "ok",
  "name" : "meta_c1",
  "operational_status" : "ok",
  "storage_array_family" : "unknown",
  "system_id" : "meta_c1",
  "volume_uuid" : 1154279114901807020
}

```

## 3.26. Metadata backup

### 3.26.1. Create List of configured MetaData Backups Volume with their scheduled time

```
POST /clusters/{cluster_name}/metadata_backups
```

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>metadata_backup_payload</b> <i>required</i>		<a href="#">metadata_backup_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Created	<a href="#">Response 201</a>

#### Response 201

Name	Schema
<b>backup_volumes</b> <i>optional</i>	< string (URI) > array
<b>hours</b> <i>optional</i>	integer
<b>minutes</b> <i>optional</i>	integer

### 3.26.2. List the configured MetaData Backup settings

```
GET /clusters/{cluster_name}/metadata_backups
```

#### Parameters

Type	Name	Description	Schema
<b>Path</b>	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

#### Responses

HTTP Code	Description	Schema
<b>200</b>	A List of MetaData Backup settings	<a href="#">Response 200</a>

#### Response 200

Name	Schema
<b>backup_volumes</b> <i>optional</i>	< string (URI) > array
<b>hours</b> <i>optional</i>	integer
<b>minutes</b> <i>optional</i>	integer

### 3.26.3. Delete configured Metadata backup settings

```
DELETE /clusters/{cluster_name}/metadata_backups
```

#### Parameters

Type	Name	Description	Schema
<b>Path</b>	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

## Responses

HTTP Code	Description	Schema
204	Deleted	No Content

## 3.27. Monitors

### 3.27.1. Return the list of names of active performance monitors

```
GET /clusters/{cluster_name}/system_monitors
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

#### Responses

HTTP Code	Description	Schema
200	The list of names of all active monitors <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< string > array

#### Example HTTP response

##### Response 200

```
[ "director-1-1-A_PERPETUAL_vplex_sys_perf_mon_v31", "director-1-1-B_PERPETUAL_vplex_sys_perf_mon_v31" ]
```

### 3.27.2. Return performance stats for the given perf monitor.

```
GET /clusters/{cluster_name}/system_monitors/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

#### Responses

HTTP Code	Description	Schema
200	The stats for the given monitor	<a href="#">Monitors</a>

### 3.27.3. Return the list of names of active vvol monitors

```
GET /clusters/{cluster_name}/vvol_monitors
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

#### Responses

HTTP Code	Description	Schema
200	The list of names of all active vvol monitors	< string > array

#### Example HTTP response

##### Response 200

```
[ "director-1-1-A_VIRTUAL_VOLUMES_PERPETUAL_MONITOR", "director-1-1-B_VIRTUAL_VOLUMES_PERPETUAL_MONITOR" ]
```



### 3.27.4. Return performance stats for the given vvol monitor.

```
GET /clusters/{cluster_name}/vvol_monitors/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	The stats for the given vvol monitor	<a href="#">Monitors</a>

## 3.28. Permissions

### 3.28.1. Returns the Role-Based Authentication configuration

```
GET /permissions/
```

#### Parameters

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <a href="#">SortingOrderExpression</a> for details.	string ( <a href="#">SortingOrderExpression</a> )

#### Responses

HTTP Code	Description	Schema
200	A JSON array of permission records <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">Permission</a> > array

### 3.28.2. Return the Role-Based Authentication configuration for one role

```
GET /permissions/{rbac_role}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>rbac_role</b> <i>required</i>	The name of the role	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

#### Responses

HTTP Code	Description	Schema
200	The Role-Based Authentication configuration for one role	<a href="#">Permission</a>

#### Example HTTP response

##### Response 200

```
{
  "/a/path/to/endpoint1" : [ "GET" ],
  "/a/path/to/endpoint2" : [ "PATCH", "POST" ],
  ".*" : [ "GET", "POST", "PATCH", "DELETE" ]
}
```

### 3.28.3. Modify the Role-Based Authentication configuration for this role

```
PATCH /permissions/{rbac_role}
```

#### Description

To add/remove a path pattern rule, use an add/remove patch with path "/" and value "/path/pattern". A new path pattern rule is created with all verbs forbidden. To permit/forbid a verb

at an existing path pattern, use an add/remove patch with path `"/path/pattern"` and value `"verb"`.

## Parameters

Type	Name	Description	Schema
Path	<b>rbac_role</b> <i>required</i>	The name of the role	string
Body	<b>permission_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated permissions	<a href="#">Permission</a>

## Example HTTP response

### Response 200

```
{
  "/a/path/to/endpoint1" : [ "GET" ],
  "/a/path/to/endpoint2" : [ "PATCH", "POST" ],
  ".*" : [ "GET", "POST", "PATCH", "DELETE" ]
}
```

## 3.29. Storage\_array

### 3.29.1. Returns a list of StorageArrays

```
GET /clusters/{cluster_name}/storage_arrays
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>connectivity_status</b> <i>optional</i>	Filter results by connectivity_status. See <a href="#">LexicalQueryExpression</a> for details.	string ( <a href="#">LexicalQueryExpression</a> )
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <a href="#">FieldSelectionExpression</a> for details.	string ( <a href="#">FieldSelectionExpression</a> )

Type	Name	Description	Schema
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>logical_unit_count</b> <i>optional</i>	Filter results by logical_unit_count. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of storage arrays <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">StorageArray</a> > array

### 3.29.2. Returns a single StorageArray by name

```
GET /clusters/{cluster_name}/storage_arrays/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single StorageArray	<a href="#">StorageArray</a>

### Example HTTP response

#### Response 200

```
{
  "name" : "EMC-SYMMETRIX-196801161",
  "controllers" : [ 196801161 ],
  "connectivity_status" : "ok",
  "ports" : [ 5764617914037707864, 5764617914037707868 ],
  "logical_unit_count" : 502
}
```

### 3.29.3. Get the default name mapping for claimable volumes on this array

```
GET /clusters/{cluster_name}/storage_arrays/{name}/name_mapping
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	Returns the list of unclaimed storage volumes and their default names	<a href="#">Response 200</a>

#### Response 200

Name	Schema
<b>claimable_storage_volumes</b> <i>optional</i>	< <a href="#">inline_response_200_claimable_storage_volumes</a> > array
<b>storage_array</b> <i>optional</i>	string
<b>unclaimed_storage_volumes</b> <i>optional</i>	integer

### 3.29.4. Rediscover LUNs on the array

```
POST /clusters/{cluster_name}/storage_arrays/{name}/rediscover
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	The array rediscover was successful, return updated StorageArray	<a href="#">StorageArray</a>
204	The array rediscover was successful, no response content	No Content

#### Example HTTP response

##### Response 200

```
{
  "name" : "EMC-SYMMETRIX-196801161",
  "controllers" : [ 196801161 ],
  "connectivity_status" : "ok",
  "ports" : [ 5764617914037707864, 5764617914037707868 ],
  "logical_unit_count" : 502
}
```

## 3.30. Storage\_group

### 3.30.1. Return the list storage groups

```
GET /clusters/{cluster_name}/storage_arrays/{storagearray_name}/storage_groups
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string

Type	Name	Description	Schema
Path	<b>storagearray_name</b> <i>required</i>	The name of the storage array	string
Query	<b>SRP</b> <i>optional</i>	Filter storage groups based on storage pools they belong to. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>policy</b> <i>optional</i>	Filter storage groups by policy. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

## Responses

HTTP Code	Description	Schema
200	The list of names of storage groups	< StorageGroup > array
404	When no storage groups are found	Error

### 3.30.2. Return details of a given storage group

```
GET /clusters/{cluster_name}/storage_arrays/{storagearray_name}/storage_groups/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

Type	Name	Description	Schema
Path	<b>storagearray_name</b> <i>required</i>	The name of the storage array	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	The single storage group	<a href="#">StorageGroup</a>
404	When no storage group is found	<a href="#">Error</a>

## 3.31. Storage\_pool

### 3.31.1. Return the list storage pools

```
GET /clusters/{cluster_name}/storage_arrays/{storagearray_name}/storage_pools
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>storagearray_name</b> <i>required</i>	The name of the storage array	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>policies</b> <i>optional</i>	Filter storage pools by policies. See LexicalQueryExpression for details.	string (LexicalQueryExpression)



Type	Name	Description	Schema
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See <code>SortingOrderExpression</code> for details.	string ( <code>SortingOrderExpression</code> )

## Responses

HTTP Code	Description	Schema
200	The list of names of storage pools	< <a href="#">StoragePool</a> > array
404	When no storage pools are found	<a href="#">Error</a>

### 3.31.2. Return details of a given storage pool

```
GET /clusters/{cluster_name}/storage_arrays/{storagearray_name}/storage_pools/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Path	<b>storagearray_name</b> <i>required</i>	The name of the storage array	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <code>FieldSelectionExpression</code> for details.	string ( <code>FieldSelectionExpression</code> )

## Responses

HTTP Code	Description	Schema
200	Name of the storage pool to fetch	<a href="#">StoragePool</a>
404	When no storage pools is found	<a href="#">Error</a>

## 3.32. Storage\_volume

### 3.32.1. Returns a list of StorageVolume objects. Supports paging

```
GET /clusters/{cluster_name}/storage_volumes
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>capacity</b> <i>optional</i>	Filter results by capacity. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>largest_free_chunk</b> <i>optional</i>	Filter results by largest_free_chunk. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>provision_type</b> <i>optional</i>	Filter results by provision_type. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>storage_array_name</b> <i>optional</i>	Filter results by storage_array_name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>thin_capable</b> <i>optional</i>	Filter results by thin_capable. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>thin_rebuild</b> <i>optional</i>	Filter results by thin_rebuild. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

Type	Name	Description	Schema
Query	<b>use</b> <i>optional</i>	Filter results by use. See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )
Query	<b>vendor_specific_name</b> <i>optional</i>	Filter results by <code>vendor_specific_name</code> . See <code>LexicalQueryExpression</code> for details.	string ( <code>LexicalQueryExpression</code> )

## Responses

HTTP Code	Description	Schema
200	A list of <code>StorageVolume</code> objects <b>Headers :</b> <code>X-Total-Count</code> (integer) : The total number of entities in the result set after filtering.	< <a href="#">StorageVolume</a> > array

### 3.32.2. Returns a single `StorageVolume` by name

```
GET /clusters/{cluster_name}/storage_volumes/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See <code>FieldSelectionExpression</code> for details.	string ( <code>FieldSelectionExpression</code> )

## Responses

HTTP Code	Description	Schema
200	A single <code>StorageVolume</code>	<a href="#">StorageVolume</a>

## Example HTTP response

### Response 200

```

{
  "name" : "Test_svol",
  "application_consistent" : false,
  "block_count" : 262144,
  "block_size" : 4096,
  "capacity" : 1073741824,
  "health_indications" : [ ],
  "health_state" : "ok",
  "operational_status" : "ok",
  "io_status" : "alive",
  "itls" : [ {
    "initiator" : 5764629798346474768,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474768,
    "target" : 5766297907403686597,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297907403686597,
    "lun" : 423
  } ],
  "largest_free_chunk" : 1073741824,
  "provision_type" : "legacy",
  "storage_array_family" : "unknown",
  "storage_array_name" : "EMC-CLARiON-FNM00123456789",
  "storage_volumetype" : "traditional",
  "system_id" : "VPD83T3:600601600aa03d0028e82f5a5b645410",
  "thin_capable" : true,
  "thin_rebuild" : true,
  "use" : "used",
  "used_by" : [ "extent_db1" ],
  "vendor_specific_name" : "EMC"
}

```

### 3.32.3. Storage volume is not really missing it will reappear after being forgotten

```
DELETE /clusters/{cluster_name}/storage_volumes/{name}
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

## Responses

HTTP Code	Description	Schema
204	Storage Volume is forgotten	No Content

### 3.32.4. Update attributes on a StorageVolume

```
PATCH /clusters/{cluster_name}/storage_volumes/{name}
```

## Description

Settable attributes: 'name' and 'thin\_rebuild'

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>storage_volume_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

## Responses

HTTP Code	Description	Schema
200	The updated StorageVolume	<a href="#">StorageVolume</a>

## Example HTTP response

### Response 200

```

{
  "name" : "Test_svol",
  "application_consistent" : false,
  "block_count" : 262144,
  "block_size" : 4096,
  "capacity" : 1073741824,
  "health_indications" : [ ],
  "health_state" : "ok",
  "operational_status" : "ok",
  "io_status" : "alive",
  "itls" : [ {
    "initiator" : 5764629798346474768,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474768,
    "target" : 5766297907403686597,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297907403686597,
    "lun" : 423
  } ],
  "largest_free_chunk" : 1073741824,
  "provision_type" : "legacy",
  "storage_array_family" : "unknown",
  "storage_array_name" : "EMC-CLARiON-FNM00123456789",
  "storage_volumetype" : "traditional",
  "system_id" : "VPD83T3:600601600aa03d0028e82f5a5b645410",
  "thin_capable" : true,
  "thin_rebuild" : true,
  "use" : "used",
  "used_by" : [ "extent_db1" ],
  "vendor_specific_name" : "EMC"
}

```

### 3.32.5. Claim a StorageVolume

```
POST /clusters/{cluster_name}/storage_volumes/{name}/claim
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>claim_payload</b> <i>required</i>		<a href="#">claim_payload</a>

## Responses

HTTP Code	Description	Schema
200	The update was successful, return updated StorageVolume	<a href="#">StorageVolume</a>
204	The update was successful, no response content	No Content

## Example HTTP response

### Response 200

```

{
  "name" : "Test_svol",
  "application_consistent" : false,
  "block_count" : 262144,
  "block_size" : 4096,
  "capacity" : 1073741824,
  "health_indications" : [ ],
  "health_state" : "ok",
  "operational_status" : "ok",
  "io_status" : "alive",
  "itls" : [ {
    "initiator" : 5764629798346474768,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474768,
    "target" : 5766297907403686597,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297907403686597,
    "lun" : 423
  } ],
  "largest_free_chunk" : 1073741824,
  "provision_type" : "legacy",
  "storage_array_family" : "unknown",
  "storage_array_name" : "EMC-CLARiON-FNM00123456789",
  "storage_volumetype" : "traditional",
  "system_id" : "VPD83T3:600601600aa03d0028e82f5a5b645410",
  "thin_capable" : true,
  "thin_rebuild" : true,
  "use" : "used",
  "used_by" : [ "extent_db1" ],
  "vendor_specific_name" : "EMC"
}

```

### 3.32.6. Unclaim a StorageVolume

```
POST /clusters/{cluster_name}/storage_volumes/{name}/unclaim
```

#### Parameters



Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>unclaim_payload</b> <i>required</i>		<a href="#">unclaim_payload</a>

## Responses

HTTP Code	Description	Schema
200	The update was successful, return updated StorageVolume	<a href="#">StorageVolume</a>
204	The update was successful, no response content <b>Headers :</b> <b>Location</b> (string) : URI of unclaimed Storage Volume.	No Content

## Example HTTP response

### Response 200

```

{
  "name" : "Test_svol",
  "application_consistent" : false,
  "block_count" : 262144,
  "block_size" : 4096,
  "capacity" : 1073741824,
  "health_indications" : [ ],
  "health_state" : "ok",
  "operational_status" : "ok",
  "io_status" : "alive",
  "itls" : [ {
    "initiator" : 5764629798346474768,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474768,
    "target" : 5766297907403686597,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297903108719301,
    "lun" : 423
  }, {
    "initiator" : 5764629798346474769,
    "target" : 5766297907403686597,
    "lun" : 423
  } ],
  "largest_free_chunk" : 1073741824,
  "provision_type" : "legacy",
  "storage_array_family" : "unknown",
  "storage_array_name" : "EMC-CLARiON-FNM00123456789",
  "storage_volumetype" : "traditional",
  "system_id" : "VPD83T3:600601600aa03d0028e82f5a5b645410",
  "thin_capable" : true,
  "thin_rebuild" : true,
  "use" : "used",
  "used_by" : [ "extent_db1" ],
  "vendor_specific_name" : "EMC"
}

```

## 3.33. System\_config

### 3.33.1. Return the system configuration

```
GET /system_config
```

## Responses

HTTP Code	Description	Schema
200	The configuration object	<a href="#">SystemConfig</a>
500	When configuration cannot be obtained	<a href="#">Error</a>

## Example HTTP response

### Response 200

```
{
  "platform" : "VS2",
  "product_type" : "metro",
  "wan_type" : "FC",
  "limits" : {
    "storage_volume_size" : 70368744177664
  }
}
```

## 3.34. Token

### 3.34.1. URL to authenticate and get back access\_token in case of success

POST /token

### Parameters

Type	Name	Schema
Header	<b>password</b> <i>required</i>	string (password)
Header	<b>username</b> <i>required</i>	string
Body	<b>token_payload</b> <i>optional</i>	<a href="#">LoginPayload</a>

### Responses

HTTP Code	Description	Schema
200	Authenticated	<a href="#">LoginResponse</a>
400	Invalid input	<a href="#">Error</a>
401	User not authorized	<a href="#">Error</a>

### 3.34.2. Endpoint to logout and invalidate/delete the token

DELETE /token

#### Responses

HTTP Code	Description	Schema
204	User successfully logged out	No Content
401	User not authorized	<a href="#">Error</a>
500	Internal server error	<a href="#">Error</a>

## 3.35. Version

### 3.35.1. Returns a list of versions of the VPLEX components

GET /versions

#### Parameters

Type	Name	Description	Schema
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.</b></p>	integer (int32)
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b></p>	integer (int32)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)

#### Responses

HTTP Code	Description	Schema
200	A JSON array of versions <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	<a href="#">Versions</a>
500	Versions could not be retrieved	<a href="#">Error</a>

## 3.36. Virtual\_volume

### 3.36.1. Create a new virtual volume

```
POST /clusters/{cluster_name}/virtual_volumes
```

#### Parameters

Type	Name	Description	Schema
Header	<b>X-Include-Object</b> <i>optional</i>	When passed as part of a POST request, controls whether the representation of the newly created object is included in the response. Defaults to 'true' which will include the object in the response. This header is useful because refreshing the newly created object is usually the slowest part of a POST operation.	string
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Body	<b>virtual_volume_payload</b> <i>required</i>		<a href="#">virtual_volume_payload</a>

#### Responses

HTTP Code	Description	Schema
201	Created <b>Headers :</b> <b>Location</b> (string) : URI of created VirtualVolume.	<a href="#">VirtualVolume</a>
204	Created <b>Headers :</b> <b>Location</b> (string) : URI of created VirtualVolume.	No Content

#### Example HTTP response

##### Response 201

```

{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}

```

### 3.36.2. Returns a list of virtual volumes

```
GET /clusters/{cluster_name}/virtual_volumes
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Query	<b>capacity</b> <i>optional</i>	Filter results by capacity. See NumericQueryExpression for details.	string (NumericQueryExpression)
Query	<b>consistency_group</b> <i>optional</i>	Filter results by consistency_group. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)
Query	<b>health_state</b> <i>optional</i>	Filter results by health_state. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>limit</b> <i>optional</i>	<p>Maximum number of elements to include in paginated results.  <b>'offset' must also be specified.<b>	integer (int32)
Query	<b>name</b> <i>optional</i>	Filter results by name. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

Type	Name	Description	Schema
Query	<b>offset</b> <i>optional</i>	Index of the first element to include in paginated results.  <b>'limit' must also be specified.</b>	integer (int32)
Query	<b>operational_status</b> <i>optional</i>	Filter results by operational_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>service_status</b> <i>optional</i>	Filter results by service_status. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>sort_by</b> <i>optional</i>	Specify the field priority order and direction for sorting. See SortingOrderExpression for details.	string (SortingOrderExpression)
Query	<b>thin_enabled</b> <i>optional</i>	Filter results by thin_enabled. See LexicalQueryExpression for details.	string (LexicalQueryExpression)
Query	<b>visibility</b> <i>optional</i>	Filter results by visibility. See LexicalQueryExpression for details.	string (LexicalQueryExpression)

## Responses

HTTP Code	Description	Schema
200	A JSON array of virtual volumes <b>Headers :</b> <b>X-Total-Count</b> (integer) : The total number of entities in the result set after filtering.	< <a href="#">VirtualVolume</a> > array

### 3.36.3. Return a VirtualVolume matching the provided name

```
GET /clusters/{cluster_name}/virtual_volumes/{name}
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Query	<b>fields</b> <i>optional</i>	Select which fields are included in the response. 'name' is always included. See FieldSelectionExpression for details.	string (FieldSelectionExpression)

## Responses

HTTP Code	Description	Schema
200	A single VirtualVolume	<a href="#">VirtualVolume</a>

## Example HTTP response

### Response 200

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

## 3.36.4. Deletes a single VirtualVolume

```
DELETE /clusters/{cluster_name}/virtual_volumes/{name}
```

### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

### Responses

HTTP Code	Description	Schema
204	Deleted	No Content



### 3.36.5. Update attributes on a VirtualVolume

```
PATCH /clusters/{cluster_name}/virtual_volumes/{name}
```

#### Description

Settable attributes: 'name'

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>virtual_volume_patch_payload</b> <i>required</i>		< <a href="#">JsonPatchOp</a> > array

#### Responses

HTTP Code	Description	Schema
200	The updated VirtualVolume	<a href="#">VirtualVolume</a>

#### Example HTTP response

##### Response 200

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

### 3.36.6. cache invalidate on virtual volume

```
POST /clusters/{cluster_name}/virtual_volumes/{name}/cache_invalidate
```

#### Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string

#### Responses

HTTP Code	Description	Schema
200	URI of VirtualVolumeCacheInvalidate	<a href="#">VirtualVolume</a>

#### Produces

- `application/json`

#### Example HTTP response

##### Response 200

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

### 3.36.7. Expand the capacity of a VirtualVolume

```
POST /clusters/{cluster_name}/virtual_volumes/{name}/expand
```

## Parameters

Type	Name	Description	Schema
Path	<b>cluster_name</b> <i>required</i>	The name of the cluster	string
Path	<b>name</b> <i>required</i>	The name of a specific instance of the resource	string
Body	<b>virtual_volume_expand_payload</b> <i>required</i>		<a href="#">virtual_volume_expand_payload</a>

## Responses

HTTP Code	Description	Schema
200	The updated VirtualVolume	<a href="#">VirtualVolume</a>

## Example HTTP response

### Response 200

```
{
  "name" : "TEST_vvol",
  "operational_status" : "ok",
  "health_state" : "ok",
  "service_status" : "running",
  "block_count" : 524288,
  "block_size" : 4096,
  "capacity" : 2147483648,
  "locality" : "local",
  "expandable" : true,
  "vpd_id" : "VPD83T3:6000144000000010016d5f9474ade8e0",
  "thin_enabled" : "disabled",
  "storage_array_family" : "unknown",
  "supporting_device" : "TEST",
  "visibility" : "local"
}
```

# Chapter 4. Definitions

## 4.1. Aggregate

Name	Schema
<b>count</b> <i>optional</i>	integer
<b>group</b> <i>optional</i>	< string > array

## 4.2. Aggregates

Type : < [Aggregate](#) > array

## 4.3. ArrayManagementProvider

Name	Schema
<b>connectivity</b> <i>optional</i>	enum (connected, unreachable)
<b>ip_address</b> <i>optional</i>	string
<b>managed_arrays</b> <i>optional</i>	< string (URI) > array
<b>name</b> <i>optional</i>	string
<b>port</b> <i>optional</i>	string
<b>provider_type</b> <i>optional</i>	enum (SMI-S, REST)
<b>use_ssl</b> <i>optional</i>	boolean
<b>user_name</b> <i>optional</i>	string

## 4.4. BulkResponse

Name	Schema
<b>status</b> <i>optional</i>	string
<b>tasks</b> <i>optional</i>	< <a href="#">BulkResponse_tasks</a> > array

## 4.5. BulkResponse\_tasks

Name	Schema
<b>additionalProperties</b> <i>optional</i>	object
<b>object</b> <i>optional</i>	string
<b>reason</b> <i>optional</i>	object
<b>status</b> <i>optional</i>	string

## 4.6. Certificate

Name	Schema
<b>MD5</b> <i>optional</i>	string
<b>SHA1</b> <i>optional</i>	string
<b>encoded_certificate</b> <i>optional</i>	string
<b>expires_on</b> <i>optional</i>	string (date-time)
<b>ip_address</b> <i>optional</i>	string
<b>issued_by</b> <i>optional</i>	string
<b>issued_on</b> <i>optional</i>	string (date-time)
<b>issued_to</b> <i>optional</i>	string

## 4.7. Cluster

Name	Schema
<b>allow_auto_join</b> <i>optional</i>	boolean
<b>cluster_id</b> <i>optional</i>	integer (int32)
<b>connected</b> <i>optional</i>	boolean
<b>directors</b> <i>optional</i>	< string (URI) > array

Name	Schema
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>ip_address</b> <i>optional</i>	string
<b>is_local</b> <i>optional</i>	boolean
<b>island_id</b> <i>optional</i>	integer (int32)
<b>name</b> <i>required</i>	string
<b>operational_status</b> <i>optional</i>	string
<b>system_time</b> <i>optional</i>	string
<b>top_level_assembly</b> <i>optional</i>	string
<b>transition_indications</b> <i>optional</i>	< string > array
<b>transition_progress</b> <i>optional</i>	< string > array

## 4.8. ClusterWitness

Name	Description	Schema
<b>admin_state</b> <i>optional</i>		<a href="#">admin_state</a>
<b>components</b> <i>optional</i>		< <a href="#">ClusterWitness_components</a> > array
<b>private_ip_address</b> <i>optional</i>	Only on VS2 and VS6 systems.	string
<b>public_ip_address</b> <i>optional</i>		string
<b>username</b> <i>optional</i>	Account used to administer the cluster-witness server.	string

## 4.9. ClusterWitness\_components

Name	Schema
<b>admin_state</b> <i>optional</i>	<a href="#">admin_state</a>
<b>diagnostic</b> <i>optional</i>	< string > array
<b>management_connectivity</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>operational_state</b> <i>optional</i>	string

## 4.10. ConsistencyGroup

Name	Schema
<b>active_clusters</b> <i>optional</i>	< string (URI) > array
<b>auto_resume_at_loser</b> <i>optional</i>	boolean
<b>cache_mode</b> <i>optional</i>	string
<b>detach_rule</b> <i>optional</i>	object
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	< <a href="#">ConsistencyGroup_operational_status</a> > array
<b>passive_clusters</b> <i>optional</i>	< string (URI) > array
<b>read_only</b> <i>optional</i>	boolean
<b>storage_at_clusters</b> <i>optional</i>	< string (URI) > array
<b>virtual_volumes</b> <i>optional</i>	< string (URI) > array
<b>visibility</b> <i>optional</i>	< string (URI) > array

## 4.11. ConsistencyGroup\_operational\_status

Name	Schema
<b>cluster</b> <i>optional</i>	string (URI)
<b>details</b> <i>optional</i>	< string > array
<b>summary</b> <i>optional</i>	string

## 4.12. Device

Name	Schema
<b>application_consistent</b> <i>optional</i>	boolean
<b>auto_resume</b> <i>optional</i>	boolean
<b>block_count</b> <i>optional</i>	number
<b>block_size</b> <i>optional</i>	number
<b>capacity</b> <i>optional</i>	number
<b>geometry</b> <i>optional</i>	string
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>locality</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	string
<b>rebuild_allowed</b> <i>optional</i>	boolean
<b>rebuild_eta</b> <i>optional</i>	string
<b>rebuild_progress</b> <i>optional</i>	string
<b>rebuild_status</b> <i>optional</i>	string
<b>rebuild_type</b> <i>optional</i>	string



Name	Schema
<b>service_status</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	string
<b>stripe_depth</b> <i>optional</i>	string
<b>system_id</b> <i>optional</i>	string
<b>thin_capable</b> <i>optional</i>	boolean
<b>top_level</b> <i>optional</i>	boolean
<b>transfer_size</b> <i>optional</i>	number
<b>virtual_volume</b> <i>optional</i>	string (URI)
<b>visibility</b> <i>optional</i>	string

## 4.13. DeviceMigration

Name	Schema
<b>from_cluster</b> <i>optional</i>	string (URI)
<b>name</b> <i>required</i>	string
<b>percentage_done</b> <i>optional</i>	integer
<b>source</b> <i>optional</i>	string (URI)
<b>source_exported</b> <i>optional</i>	boolean
<b>start_time</b> <i>optional</i>	string
<b>status</b> <i>optional</i>	string
<b>target</b> <i>optional</i>	string (URI)
<b>target_exported</b> <i>optional</i>	boolean
<b>to_cluster</b> <i>optional</i>	string (URI)

Name	Schema
<b>transfer_size</b> <i>optional</i>	integer
<b>type</b> <i>optional</i>	string

## 4.14. Director

Name	Schema
<b>auto_boot</b> <i>optional</i>	boolean
<b>auto_restart</b> <i>optional</i>	boolean
<b>cluster_id</b> <i>optional</i>	integer
<b>communication_status</b> <i>optional</i>	<a href="#">communication_status</a>
<b>director_count</b> <i>optional</i>	integer
<b>director_family</b> <i>optional</i>	string
<b>director_id</b> <i>optional</i>	string
<b>director_type</b> <i>optional</i>	string
<b>engine_id</b> <i>optional</i>	string
<b>failover_hostname</b> <i>optional</i>	string
<b>firmware_uptime</b> <i>optional</i>	integer
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	<a href="#">health_state</a>
<b>hostname</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	<a href="#">operational_status</a>
<b>os_uptime</b> <i>optional</i>	integer

Name	Schema
<b>port</b> <i>optional</i>	integer
<b>run_level</b> <i>optional</i>	integer
<b>serial_number</b> <i>optional</i>	string
<b>system_time</b> <i>optional</i>	string
<b>temperature_threshold_exceeded</b> <i>optional</i>	boolean
<b>voltage_threshold_exceeded</b> <i>optional</i>	boolean

## 4.15. DirectorPort

Name	Schema
<b>address</b> <i>optional</i>	string
<b>enabled</b> <i>optional</i>	boolean
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	<a href="#">operational_status</a>
<b>role</b> <i>optional</i>	<a href="#">role</a>
<b>status</b> <i>optional</i>	<a href="#">status</a>

## 4.16. DistributedDevice

Name	Schema
<b>capacity</b> <i>optional</i>	integer
<b>geometry</b> <i>optional</i>	string
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string

Name	Schema
<b>operational_status</b> <i>optional</i>	string
<b>rebuild_allowed</b> <i>optional</i>	boolean
<b>rebuild_eta</b> <i>optional</i>	integer
<b>rebuild_progress</b> <i>optional</i>	integer
<b>rebuild_status</b> <i>optional</i>	string
<b>rebuild_type</b> <i>optional</i>	string
<b>rule_set_name</b> <i>optional</i>	string (URI)
<b>service_status</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	<a href="#">storage_array_family</a>
<b>thin_capable</b> <i>optional</i>	boolean
<b>virtual_volume</b> <i>optional</i>	string (URI)

## 4.17. Engine

Name	Schema
<b>cluster_ip_seed</b> <i>optional</i>	string
<b>enclosure_id</b> <i>optional</i>	string
<b>engine_family</b> <i>optional</i>	string
<b>engine_id</b> <i>optional</i>	string
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>marker_led</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string

Name	Schema
<b>operational_status</b> <i>optional</i>	string
<b>part_number</b> <i>optional</i>	string
<b>revision_number</b> <i>optional</i>	string
<b>serial_number</b> <i>optional</i>	string
<b>top_level_assembly</b> <i>optional</i>	string
<b>wwn_seed</b> <i>optional</i>	string

## 4.18. Error

A wrapper for an error message

Name	Schema
<b>cause</b> <i>optional</i>	string
<b>error_code</b> <i>optional</i>	string
<b>message</b> <i>required</i>	string

## 4.19. Extent

Name	Schema
<b>application_consistent</b> <i>optional</i>	string
<b>block_count</b> <i>optional</i>	number
<b>block_offset</b> <i>optional</i>	number
<b>block_size</b> <i>optional</i>	number
<b>capacity</b> <i>optional</i>	number
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string

Name	Schema
<b>io_status</b> <i>optional</i>	string
<b>itls</b> <i>optional</i>	< string > array
<b>locality</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	string
<b>storage_volume</b> <i>optional</i>	string (URI)
<b>storage_volumetype</b> <i>optional</i>	string
<b>system_id</b> <i>optional</i>	string
<b>thin-capable</b> <i>optional</i>	boolean
<b>underlying_storage_block_size</b> <i>optional</i>	number
<b>use</b> <i>optional</i>	string
<b>used_by</b> <i>optional</i>	< string (URI) > array
<b>vendor_specific_name</b> <i>optional</i>	string

## 4.20. ExtentMigration

Name	Schema
<b>from_cluster</b> <i>optional</i>	string (URI)
<b>name</b> <i>required</i>	string
<b>percentage_done</b> <i>optional</i>	integer
<b>source</b> <i>optional</i>	string (URI)
<b>start_time</b> <i>optional</i>	string

Name	Schema
<b>status</b> <i>optional</i>	string
<b>target</b> <i>optional</i>	string (URI)
<b>to_cluster</b> <i>optional</i>	string (URI)
<b>transfer_size</b> <i>optional</i>	integer
<b>type</b> <i>optional</i>	string

## 4.21. HardwarePort

Name	Schema
<b>address</b> <i>optional</i>	string
<b>director</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>role</b> <i>optional</i>	<a href="#">role</a>
<b>status</b> <i>optional</i>	<a href="#">status</a>

## 4.22. HardwarePorts

Type : < [HardwarePort](#) > array

## 4.23. InitiatorPort

Name	Schema
<b>bandwidth_limit</b> <i>optional</i>	string
<b>iops_limit</b> <i>optional</i>	integer
<b>iscsi_name</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>node_wwn</b> <i>optional</i>	string

Name	Schema
<b>port_wwn</b> <i>optional</i>	string
<b>target_ports</b> <i>optional</i>	< string (URI) > array
<b>type</b> <i>optional</i>	string

## 4.24. JsonPatchOp

A JsonPatch operation

Name	Description	Schema
<b>op</b> <i>required</i>	<p>The body of an HTTP PATCH is a Json array of JsonPatchOp objects. These patch operations are applied sequentially to the resource to which the PATCH was sent. If any operation results in a failure, execution of any subsequent operations is aborted, but no roll-back is performed. The field the operation acts on is specified by 'path'. Operations are applied in a consistent order, by type:</p> <ol style="list-style-type: none"> <li>1. test - Assert that the value of a scalar-valued field is equal to 'value' at the start of the patch operation.</li> <li>2. add - Insert 'value' into a collection-valued field.</li> <li>3. remove - Remove 'value' from a collection-valued field.</li> <li>4. replace - Set a scalar-valued field to 'value'.</li> </ol> <p>Operations of the same type are applied in the order they appear in the patch body.</p>	enum (add, remove, replace, test)
<b>path</b> <i>required</i>	A Json pointer to the target of an operation	string
<b>value</b> <i>required</i>	The value to be used for the given operation	object

## 4.25. License

Name	Description	Schema
<b>capacity</b> <i>optional</i>	Capacity allowed by the license. Only applicable to capacity-based license.	number
<b>expiry_date</b> <i>optional</i>		string (date-time)
<b>feature_name</b> <i>required</i>		string
<b>issued_date</b> <i>optional</i>		string (date-time)



Name	Description	Schema
<b>issuer</b> <i>optional</i>		string
<b>notice</b> <i>optional</i>		string
<b>notification</b> <i>optional</i>	Notification for the license. Only applicable to capacity-based license.	string
<b>platform</b> <i>optional</i>		string
<b>plc</b> <i>optional</i>		string
<b>product_line</b> <i>optional</i>		string
<b>uom_code</b> <i>optional</i>		string
<b>uom_name</b> <i>optional</i>		string
<b>usage</b> <i>optional</i>	usage of the license. Only applicable to capacity-based license.	number
<b>valid</b> <i>optional</i>		string

## 4.26. LicenseArray

Type : < [License](#) > array

## 4.27. LocalComHealth

Name	Schema
<b>details</b> <i>optional</i>	< string > array
<b>status</b> <i>optional</i>	<a href="#">com_status</a>

## 4.28. LoggingVolume

Name	Schema
<b>application_consistent</b> <i>optional</i>	boolean
<b>block_count</b> <i>optional</i>	integer
<b>block_size</b> <i>optional</i>	integer

Name	Schema
<b>capacity</b> <i>optional</i>	integer
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	<a href="#">storage_array_family</a>
<b>system_id</b> <i>optional</i>	string

## 4.29. LogicalUnit

Name	Schema
<b>active_aao_controller</b> <i>optional</i>	< string > array
<b>active_aao_visibility</b> <i>optional</i>	< string > array
<b>alua_support</b> <i>optional</i>	enum (implicit, explicit, none, implicit-explicit)
<b>connectivity_status</b> <i>optional</i>	<a href="#">connectivity_status</a>
<b>luns</b> <i>optional</i>	< string > array
<b>name</b> <i>optional</i>	string
<b>passive_aan_controller</b> <i>optional</i>	< string > array
<b>passive_aan_visibility</b> <i>optional</i>	< string > array
<b>storage_volume</b> <i>optional</i>	string (URI)
<b>visibility</b> <i>optional</i>	enum (active, passive, active-optimized, active-non-optimized, both, both-alua, none)

## 4.30. LoginPayload

Name	Description	Schema
<b>expiry</b> <i>optional</i>	Expiry time	string

## 4.31. LoginResponse

Name	Description	Schema
<b>expires_in</b> <i>optional</i>	Expiry time	string
<b>token</b> <i>optional</i>	JWT token	string
<b>token_type</b> <i>optional</i>	Bearer token	string

## 4.32. MetaVolume

Name	Schema
<b>active</b> <i>optional</i>	boolean
<b>application_consistent</b> <i>optional</i>	boolean
<b>block_count</b> <i>optional</i>	integer
<b>block_size</b> <i>optional</i>	integer
<b>capacity</b> <i>optional</i>	integer
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	<a href="#">storage_array_family</a>
<b>system_id</b> <i>optional</i>	string
<b>volume_uuid</b> <i>optional</i>	string

## 4.33. Monitors

Name	Schema
<b>average_period</b> <i>optional</i>	number
<b>bucket_count</b> <i>optional</i>	number
<b>bucket_max</b> <i>optional</i>	number
<b>bucket_min</b> <i>optional</i>	number
<b>bucket_width</b> <i>optional</i>	number
<b>collecting_data</b> <i>optional</i>	boolean
<b>firmware_id</b> <i>optional</i>	number
<b>idle_for</b> <i>optional</i>	number
<b>name</b> <i>optional</i>	string
<b>ownership</b> <i>optional</i>	boolean
<b>period</b> <i>optional</i>	number
<b>statistics</b> <i>optional</i>	object
<b>targets</b> <i>optional</i>	< string > array
<b>timestamp</b> <i>optional</i>	string
<b>version</b> <i>optional</i>	string

## 4.34. Permission

Type : object

## 4.35. Port

Name	Schema
<b>director</b> <i>optional</i>	string

Name	Schema
<b>director_id</b> <i>optional</i>	string
<b>discovered_initiators</b> <i>optional</i>	< string (URI) > array
<b>enabled</b> <i>optional</i>	boolean
<b>export_status</b> <i>optional</i>	string
<b>exports</b> <i>optional</i>	< <a href="#">Port_exports</a> > array
<b>iscsi_name</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>node_wwn</b> <i>optional</i>	string
<b>port_name</b> <i>optional</i>	string
<b>port_wwn</b> <i>optional</i>	string

## 4.36. Port\_exports

Name	Schema
<b>lun</b> <i>optional</i>	string
<b>status</b> <i>optional</i>	string
<b>view</b> <i>optional</i>	string (URI)
<b>volume</b> <i>optional</i>	string (URI)

## 4.37. RuleSet

Name	Schema
<b>name</b> <i>optional</i>	string

## 4.38. StorageArray

Name	Schema
<b>auto_switch</b> <i>optional</i>	boolean
<b>connectivity_status</b> <i>optional</i>	<a href="#">connectivity_status</a>
<b>controllers</b> <i>optional</i>	< string > array
<b>logical_unit_count</b> <i>optional</i>	integer
<b>name</b> <i>required</i>	string
<b>ports</b> <i>optional</i>	< string > array
<b>product_revision</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	<a href="#">storage_array_family</a>
<b>storage_groups</b> <i>optional</i>	string (URI)
<b>storage_pools</b> <i>optional</i>	string (URI)

## 4.39. StorageGroup

Name	Schema
<b>SRP</b> <i>optional</i>	string
<b>masking_views</b> <i>optional</i>	< string > array
<b>name</b> <i>optional</i>	string
<b>number_of_volumes</b> <i>optional</i>	string
<b>parent_storage_group</b> <i>optional</i>	string
<b>policy</b> <i>optional</i>	string

## 4.40. StorageMap

Name	Schema
<b>children</b> <i>optional</i>	< string (URI) > array

Name	Schema
<b>parents</b> <i>optional</i>	< string (URI) > array
<b>uri</b> <i>optional</i>	string (URI)

## 4.41. StoragePool

Name	Schema
<b>last_refreshed</b> <i>optional</i>	string (date_time)
<b>name</b> <i>optional</i>	string
<b>policies</b> <i>optional</i>	string
<b>pool_types</b> <i>optional</i>	string
<b>total_free_space</b> <i>optional</i>	number
<b>total_space</b> <i>optional</i>	number
<b>total_used_space</b> <i>optional</i>	number

## 4.42. StorageView

Name	Schema
<b>initiators</b> <i>optional</i>	< string (URI) > array
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	string
<b>ports</b> <i>optional</i>	< string (URI) > array
<b>virtual_volumes</b> <i>optional</i>	< <a href="#">StorageView_virtual_volumes</a> > array

## 4.43. StorageView\_virtual\_volumes

Name	Schema
<b>capacity</b> <i>optional</i>	integer

Name	Schema
<b>lun</b> <i>optional</i>	integer
<b>uri</b> <i>optional</i>	string (URI)
<b>vpd_id</b> <i>optional</i>	string

## 4.44. StorageVolume

Name	Schema
<b>application_consistent</b> <i>optional</i>	boolean
<b>block_count</b> <i>optional</i>	integer
<b>block_size</b> <i>optional</i>	integer
<b>capacity</b> <i>optional</i>	integer
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>io_status</b> <i>optional</i>	string
<b>itls</b> <i>optional</i>	< <a href="#">StorageVolume_itls</a> > array
<b>largest_free_chunk</b> <i>optional</i>	integer
<b>name</b> <i>optional</i>	string
<b>operational_status</b> <i>optional</i>	string
<b>provision_type</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	<a href="#">storage_array_family</a>
<b>storage_array_name</b> <i>optional</i>	string (URI)
<b>storage_volumetype</b> <i>optional</i>	string
<b>system_id</b> <i>optional</i>	string



Name	Schema
<b>thin_capable</b> <i>optional</i>	boolean
<b>thin_rebuild</b> <i>optional</i>	boolean
<b>use</b> <i>optional</i>	string
<b>used_by</b> <i>optional</i>	< string (URI) > array
<b>vendor_specific_name</b> <i>optional</i>	string

## 4.45. StorageVolume\_itls

Name	Schema
<b>initiator</b> <i>optional</i>	string
<b>lun</b> <i>optional</i>	string
<b>target</b> <i>optional</i>	string

## 4.46. SystemConfig

Name	Schema
<b>branding</b> <i>optional</i>	<a href="#">SystemConfig_branding</a>
<b>hardware_type</b> <i>optional</i>	string
<b>limits</b> <i>optional</i>	object
<b>product_type</b> <i>optional</i>	enum (local, metro, unknown)
<b>wan_type</b> <i>optional</i>	enum (FC, IP, unknown)

## 4.47. SystemConfig\_branding

Name	Schema
<b>platform</b> <i>optional</i>	enum (UNKNOWN, GENERIC, VS2, VS6)
<b>product_name</b> <i>optional</i>	string

## 4.48. Version

Name	Schema
<b>info</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string
<b>version</b> <i>optional</i>	string

## 4.49. Versions

Type : < [Version](#) > array

## 4.50. ViasJob

Name	Schema
<b>base_name</b> <i>optional</i>	string
<b>capacity</b> <i>optional</i>	integer
<b>consistency_group</b> <i>optional</i>	string (URI)
<b>date_created</b> <i>optional</i>	string (datetime)
<b>description</b> <i>optional</i>	string
<b>last_updated</b> <i>optional</i>	string (datetime)
<b>name</b> <i>optional</i>	string
<b>number_of_volumes</b> <i>optional</i>	integer
<b>status</b> <i>optional</i>	string
<b>status_details</b> <i>optional</i>	string
<b>storage_pools</b> <i>optional</i>	< <a href="#">ViasJob_storage_pools</a> > array
<b>storage_views</b> <i>optional</i>	< string (URI) > array
<b>target_cluster</b> <i>optional</i>	string (URI)

Name	Schema
<b>thin</b> <i>optional</i>	boolean

## 4.51. ViasJob\_storage\_pools

Name	Schema
<b>array</b> <i>optional</i>	string (URI)
<b>group</b> <i>optional</i>	string (URI)
<b>pool</b> <i>optional</i>	string (URI)

## 4.52. VirtualVolume

Name	Schema
<b>block_count</b> <i>optional</i>	integer
<b>block_size</b> <i>optional</i>	integer
<b>capacity</b> <i>optional</i>	integer
<b>consistency_group</b> <i>optional</i>	string
<b>expandable</b> <i>optional</i>	boolean
<b>expandable_capacity</b> <i>optional</i>	integer
<b>expansion_method</b> <i>optional</i>	string
<b>expansion_status</b> <i>optional</i>	string
<b>health_indications</b> <i>optional</i>	< string > array
<b>health_state</b> <i>optional</i>	string
<b>initialization_status</b> <i>optional</i>	string
<b>locality</b> <i>optional</i>	string
<b>name</b> <i>optional</i>	string

Name	Schema
<b>operational_status</b> <i>optional</i>	string
<b>service_status</b> <i>optional</i>	string
<b>storage_array_family</b> <i>optional</i>	string
<b>supporting_device</b> <i>optional</i>	string (URI)
<b>system_id</b> <i>optional</i>	string
<b>thin_enabled</b> <i>optional</i>	string
<b>visibility</b> <i>optional</i>	string
<b>vpd_id</b> <i>optional</i>	string

## 4.53. WanComHealth

Name	Schema
<b>details</b> <i>optional</i>	< string > array
<b>status</b> <i>optional</i>	<a href="#">com_status</a>

## 4.54. admin\_state

Type : enum (disabled, enabled, inconsistent, unknown)

## 4.55. amp\_payload

Name	Schema
<b>ip_address</b> <i>required</i>	string
<b>password</b> <i>required</i>	string (password)
<b>port</b> <i>required</i>	integer
<b>provider_name</b> <i>required</i>	string
<b>provider_type</b> <i>required</i>	string

Name	Schema
<b>use_ssl</b> <i>required</i>	boolean
<b>user_name</b> <i>required</i>	string

## 4.56. certificate\_payload

Name	Schema
<b>ssl_certificate</b> <i>required</i>	string

## 4.57. cg\_resume\_payload

Name	Description	Schema
<b>resume_at</b> <i>optional</i>	The cluster where I/O should be resumed.	string (URI)

## 4.58. claim\_payload

Name	Description	Schema
<b>application_consistent</b> <i>optional</i>	Set to mark the volume as application consistent	boolean

## 4.59. com\_status

Type : enum (not-applicable, full, partial, none)

## 4.60. communication\_status

Type : enum (unknown, ok, busy, no\_contact, lost-communication)

## 4.61. connectivity\_status

Type : enum (ok, degraded, error, initial, repairable, unknown)

## 4.62. consistency\_group\_payload

Name	Schema
<b>name</b> <i>required</i>	string

## 4.63. device\_migration\_payload

Name	Description	Schema
<b>name</b> <i>required</i>		string
<b>paused</b> <i>optional</i>		boolean
<b>source</b> <i>required</i>		string (URI)
<b>target</b> <i>required</i>		string (URI)
<b>transfer_size</b> <i>optional</i>	Number in Byte. Must be a multiple of 4K. Range: 40KB - 128M. Default: 128KB(131072).	integer

## 4.64. device\_payload

Name	Schema
<b>name</b> <i>required</i>	string
<b>primary_leg</b> <i>required</i>	string (URI)
<b>secondary_legs</b> <i>optional</i>	< string (URI) > array

## 4.65. distributed\_consistency\_group\_payload

Name	Schema
<b>name</b> <i>optional</i>	string

## 4.66. distributed\_device\_payload

Name	Schema
<b>name</b> <i>required</i>	string
<b>primary_leg</b> <i>required</i>	string (URI)
<b>rule_set</b> <i>optional</i>	string
<b>secondary_leg</b> <i>required</i>	string (URI)
<b>sync</b> <i>optional</i>	boolean

## 4.67. distributed\_virtual\_volume\_expand\_payload

Name	Description	Schema
<b>skip_init</b> <i>optional</i>	If skip_init is true the blocks of the expanded space will NOT be initialized to ensure single-disk semantics. This option should only be used under very specific circumstances, such as part of the recovery procedure after restoring metadata from backup.	boolean

## 4.68. distributed\_virtual\_volume\_payload

Name	Schema
<b>device</b> <i>optional</i>	string (URI)
<b>init</b> <i>optional</i>	boolean
<b>thin</b> <i>optional</i>	boolean
<b>tier</b> <i>optional</i>	string

## 4.69. event\_additionalData

Name	Schema
<b>category</b> <i>optional</i>	string
<b>supplementalKey</b> <i>optional</i>	boolean
<b>type</b> <i>optional</i>	string
<b>value</b> <i>optional</i>	string

## 4.70. events\_payload

Name	Description	Schema
<b>additionalData</b> <i>optional</i>	The additional details pertaining to the event.	< string, <a href="#">event_additionalData</a> > map
<b>conditionId</b> <i>optional</i>	The conditionId as specified in sms_events.yaml.	string
<b>eventSourceId</b> <i>optional</i>	Unique ID associated with the event source.	string

Name	Description	Schema
<b>resource</b> <i>optional</i>	The resource associated with the event.	string
<b>severity</b> <i>optional</i>	Severity of the Event. <b>Example</b> : "critical"	string

## 4.71. extent\_migration\_payload

Name	Description	Schema
<b>name</b> <i>optional</i>		string
<b>paused</b> <i>optional</i>		boolean
<b>source</b> <i>optional</i>		string (URI)
<b>target</b> <i>optional</i>		string (URI)
<b>transfer_size</b> <i>optional</i>	Number in Byte. Must be a multiple of 4K. Range: 40KB - 128M. Default: 128KB(131072).	integer

## 4.72. extent\_payload

Name	Schema
<b>storage_volume</b> <i>required</i>	string (URI)

## 4.73. health\_state

Type : enum (unknown, ok, degraded, minor-failure, major-failure, critical\_failure, non-recoverable-error, isolated)

## 4.74. inline\_response\_200

Name	Schema
<b>claimable_storage_volumes</b> <i>optional</i>	< <a href="#">inline_response_200_claimable_storage_volumes</a> > array
<b>storage_array</b> <i>optional</i>	string
<b>unclaimed_storage_volumes</b> <i>optional</i>	integer



## 4.75. inline\_response\_200\_1

Name	Schema
<b>backup_volumes</b> <i>optional</i>	< string (URI) > array
<b>hours</b> <i>optional</i>	integer
<b>minutes</b> <i>optional</i>	integer

## 4.76. inline\_response\_200\_claimable\_storage\_volumes

Name	Schema
<b>storage_volume_name</b> <i>optional</i>	string
<b>storage_volume_path</b> <i>optional</i>	string

## 4.77. inline\_response\_201

Name	Schema
<b>backup_volumes</b> <i>optional</i>	< string (URI) > array
<b>hours</b> <i>optional</i>	integer
<b>minutes</b> <i>optional</i>	integer

## 4.78. jobs\_storage\_pools

Name	Description	Schema
<b>storage_group</b> <i>optional</i>	Which storage group to use. If omitted, storage group is assigned automatically.	string (URI)
<b>storage_pool</b> <i>optional</i>	Which pool to provision the underlying storage from.	string (URI)

## 4.79. license\_payload

Name	Description	Schema
<b>file_data</b> <i>required</i>	Provide base64 encoded license file content.	string (byte)

## 4.80. logging\_volume\_payload

Name	Description	Schema
<b>name</b> <i>required</i>		string
<b>storage_volumes</b> <i>required</i>	The storage volumes to use in creating the logging volume. These storage volumes must be at the same cluster as the logging volume.	< string (URI) > array

## 4.81. meta\_volume\_payload

Name	Schema
<b>name</b> <i>required</i>	string
<b>storage_volumes</b> <i>required</i>	< string (URI) > array

## 4.82. metadata\_backup\_payload

Name	Schema
<b>backup_volumes</b> <i>optional</i>	< string (URI) > array
<b>hours</b> <i>required</i>	integer
<b>minutes</b> <i>required</i>	integer

## 4.83. operational\_status

Type : enum (unknown, other, ok, degraded, stressed, predictive-failure, error, non-recoverable-error, starting, stopping, stopped, in-service, no-contact, lost-communication, aborted, dormant, supporting-entity-in-error, completed, power-mode, removed, online, offline, rebooting, success, failure, write-disabled, write-protected, not-ready, unsupported, vendor-reserved)

## 4.84. rediscover\_payload

Name	Description	Schema
<b>timeout</b> <i>optional</i>	Time to allow the discovery process to take	integer
<b>wait</b> <i>optional</i>	Time to wait the discovery process before returning regardless of outcome	integer

## 4.85. register\_payload

Name	Description	Schema
<b>iscsi_name</b> <i>optional</i>	ISCSI name of the port to register. Either port_wwn or iscsi_name should be provided.	string
<b>node_wwn</b> <i>optional</i>	Provide node wwn for registering the port. <b>Example</b> : "node_wwn"	string
<b>port_name</b> <i>required</i>	Provide a new name for the registered initiator port. <b>Example</b> : "new_name"	string
<b>port_wwn</b> <i>optional</i>	WWN of the port to register. Either port_wwn or iscsi_name should be provided.	string
<b>type</b> <i>optional</i>	Provide host type for registering the port. <b>Example</b> : "host_type"	string

## 4.86. role

Type : enum (front-end, back-end, local-com, wan-com, management, inter-director-communication)

## 4.87. status

Type : enum (up, down, no-link)

## 4.88. storage\_array\_family

Type : enum (unknown, internal, other, mixed, symmetrix, clariion, xtremio)

## 4.89. storage\_view\_payload

Name	Schema
<b>name</b> <i>required</i>	string
<b>ports</b> <i>required</i>	< string (URI) > array

## 4.90. unclaim\_payload

Name	Description	Schema
<b>vias_return_to_pool</b> <i>optional</i>	For VIAS-based storage-volumes, this will return the storage capacity of each VIAS-based volume to the pool on the corresponding storage-array.	boolean

## 4.91. validate\_payload

Name	Schema
<b>file_data</b> <i>optional</i>	string (byte)

## 4.92. vias\_payload

Name	Description	Schema
<b>base_name</b> <i>required</i>	The prefix to use when naming each virtual volume.	string
<b>capacity</b> <i>required</i>	The capacity of each virtual volume, in bytes.	number
<b>consistency_group</b> <i>optional</i>	Which consistency group the virtual volumes will be added to.	string (URI)
<b>job_name</b> <i>optional</i>	The name for the provisioning job. If omitted a random name is generated.	string
<b>number_of_volumes</b> <i>required</i>	The number of virtual volumes to provision.	number
<b>storage_pools</b> <i>required</i>		< <a href="#">jobs_storage_pools</a> > array
<b>storage_views</b> <i>required</i>		< string (URI) > array
<b>thin</b> <i>optional</i>	Whether the virtual volumes and all underlying storage should be thin provisioned.	boolean

## 4.93. virtual\_volume\_expand\_payload

Name	Description	Schema
<b>skip_init</b> <i>optional</i>	If skip_init is true the blocks of the expanded space will NOT be initialized to ensure single-disk semantics. This option should only be used under very specific circumstances, such as part of the recovery procedure after restoring metadata from backup.	boolean
<b>spare_storage</b> <i>optional</i>	Specifies the target device or extent that will be concatenated to the supporting storage. It shouldn't have a virtual-volume on top of it.	string (URI)

## 4.94. virtual\_volume\_payload

<b>Name</b>	<b>Schema</b>
<b>device</b> <i>required</i>	string (URI)
<b>init</b> <i>optional</i>	boolean
<b>thin</b> <i>optional</i>	boolean
<b>tier</b> <i>optional</i>	string