

Volumes (volumes)

A volume is a detachable block storage device similar to a USB hard drive. You can attach a volume to one instance at a time.

The `snapshot_id` and `source_vol_id` parameters specify the ID of the snapshot or volume from which this volume originates. If the volume was not created from a snapshot or source volume, these values are null.

When you create, list, update, or delete volumes, the possible status values are:

Volume statuses

Status	Description
creating	The volume is being created.
available	The volume is ready to attach to an instance.
reserved	The volume is reserved for attaching or shelved.
attaching	The volume is attaching to an instance.
detaching	The volume is detaching from an instance.
in-use	The volume is attached to an instance.
maintenance	The volume is locked and being migrated.
deleting	The volume is being deleted.
awaiting-transfer	The volume is awaiting for transfer.
error	A volume creation error occurred.
error_deleting	A volume deletion error occurred.
backing-up	The volume is being backed up.
restoring-backup	A backup is being restored to the volume.
error_backing-up	A backup error occurred.
error_restoring	A backup restoration error occurred.
error_extending	An error occurred while attempting to extend a volume.
downloading	The volume is downloading an image.
uploading	The volume is being uploaded to an image.
retyping	The volume is changing type to another volume type.
extending	The volume is being extended.

List accessible volumes with details GET /v3/{project_id}/volumes/detail

Lists all Block Storage volumes, with details, that the project can access, since v3.31 if non-admin users specify invalid filters in the url, API will return bad request.

Response codes

Success

Code	Reason
200 - OK	Request was successful.

Error

Code	Reason
400 - Bad Request	Some content in the request was invalid.

Request

Name	In	Type	Description
project_id	path	string	The UUID of the project in a multi-tenancy cloud.
all_tenants (Optional)	query	string	Shows details for all project. Admin only.
sort (Optional)	query	string	Comma-separated list of sort keys and optional sort directions in the form of < key > [: < direction >]. A valid direction is <code>asc</code> (ascending) or <code>desc</code> (descending).
limit (Optional)	query	integer	Requests a page size of items. Returns a number of items up to a limit value. Use the <code>limit</code> parameter to make an initial limited request and use the ID of the last-seen item from the response as the <code>marker</code> parameter value in a subsequent limited request.
offset (Optional)	query	integer	Used in conjunction with <code>limit</code> to return a slice of items. <code>offset</code> is where to start in the list.
marker (Optional)	query	string	The ID of the last-seen item. Use the <code>limit</code> parameter to make an initial limited request and use the ID of the last-seen item from the response as the <code>marker</code> parameter value in a subsequent limited request.
with_count (Optional)	query	boolean	Whether to show <code>count</code> in API response or not, default is <code>False</code> . New in version 3.45

Response Parameters

Name	In	Type	Description
migration_status	body	string	The volume migration status.
			Instance attachment information. If this volume is

attachments	body	array	attached to a server instance, the attachments list includes the UUID of the attached server, an attachment UUID, the name of the attached host, if any, the volume UUID, the device, and the device UUID. Otherwise, this list is empty.
links	body	array	The volume links.
availability_zone (Optional)	body	string	The name of the availability zone.
os-vol-host-attr:host	body	string	Current back-end of the volume. Host format is <code>host@backend#pool</code> .
encrypted	body	boolean	If true, this volume is encrypted.
updated_at	body	string	The date and time when the resource was updated. The date and time stamp format is ISO 8601 : <code>CCYY-MM-DDThh:mm:ss±hh:mm</code> . For example, <code>2015-08-27T09:49:58-05:00</code> . The <code>±hh:mm</code> value, if included, is the time zone as an offset from UTC. In the previous example, the offset value is <code>-05:00</code> . If the <code>updated_at</code> date and time stamp is not set, its value is <code>null</code> .
replication_status	body	string	The volume replication status.
snapshot_id (Optional)	body	string	To create a volume from an existing snapshot, specify the UUID of the volume snapshot. The volume is created in same availability zone and with same size as the snapshot.
id	body	string	The UUID of the volume.
size	body	integer	The size of the volume, in gibibytes (GiB).
user_id	body	string	The UUID of the user.
os-vol-tenant-attr:tenant_id	body	string	The project ID which the volume belongs to.
os-vol-mig-status-attr:migstat	body	string	The status of this volume migration (None means that a migration is not currently in progress).
metadata	body	object	A <code>metadata</code> object. Contains one or more metadata key and value pairs that are associated with the volume.
status	body	string	The volume status.
volume_image_metadata (Optional)	body	object	List of image metadata entries. Only included for volumes that were created from an image, or from a snapshot of a volume originally created from an image.
description	body	string	The volume description.
multiattach	body	boolean	If true, this volume can attach to more than one instance.
source_volid (Optional)	body	string	The UUID of the source volume. The API creates a new volume with the same size as the source volume unless a larger size is requested.
consistencygroup_id	body	string	The UUID of the consistency group.
os-vol-mig-status-attr:name_id	body	string	The volume ID that this volume name on the back- end is based on.

name	body	string	The volume name.
bootable	body	string	Enables or disables the bootable attribute. You can boot an instance from a bootable volume.
created_at	body	string	The date and time when the resource was created.The date and time stamp format is ISO 8601 : CCYY-MM-DDThh:mm:ss±hh:mm For example, 2015-08-27T09:49:58-05:00.The ±hh:mm value, if included, is the time zone as an offset from UTC.
volumes	body	array	A list of volume objects.
volume_type	body	string	The associated volume type for the volume.
volumes_links (Optional)	body	array	The volume links.
count (Optional)	body	integer	The total count of requested resource before pagination is applied. New in version 3.45

Response Example

```
{
  "volumes": [
    {
      "migration_status": null,
      "attachments": [
        {
          "server_id": "f4fda93b-06e0-4743-8117-bc8bcecd651b",
          "attachment_id": "3b4db356-253d-4fab-bfa0-e3626c0b8405",
          "host_name": null,
          "volume_id": "6edbc2f4-1507-44f8-ac0d-eed1d2608d38",
          "device": "/dev/vdb",
          "id": "6edbc2f4-1507-44f8-ac0d-eed1d2608d38"
        }
      ],
      "links": [
        {
          "href":
"http://23.253.248.171:8776/v3/bab7d5c60cd041a0a36f7c4b6e1dd978/volumes/6edbc2f4-1507-44f8-ac0d-eed1d2608d38",
          "rel": "self"
        },
        {
          "href":
"http://23.253.248.171:8776/bab7d5c60cd041a0a36f7c4b6e1dd978/volumes/6edbc2f4-1507-44f8-ac0d-eed1d2608d38",
          "rel": "bookmark"
        }
      ],
      "availability_zone": "nova",
    }
  ]
}
```

```

        "os-vol-host-attr:host": "difleming@lvmdriver-1#lvmdriver-1",
        "encrypted": false,
        "replication_status": "disabled",
        "snapshot_id": null,
        "id": "6edbc2f4-1507-44f8-ac0d-eed1d2608d38",
        "size": 2,
        "user_id": "32779452fcd34ae1a53a797ac8a1e064",
        "os-vol-tenant-attr:tenant_id":
"bab7d5c60cd041a0a36f7c4b6e1dd978",
        "os-vol-mig-status-attr:migstat": null,
        "metadata": {
            "readonly": false,
            "attached_mode": "rw"
        },
        "status": "in-use",
        "description": null,
        "multiattach": true,
        "source_volid": null,
        "consistencygroup_id": null,
        "os-vol-mig-status-attr:name_id": null,
        "name": "test-volume-attachments",
        "bootable": "false",
        "created_at": "2015-11-29T03:01:44.000000",
        "volume_type": "lvmdriver-1"
    },
    {
        "migration_status": null,
        "attachments": [],
        "links": [
            {
                "href":
"http://23.253.248.171:8776/v3/bab7d5c60cd041a0a36f7c4b6e1dd978/volumes/173f7b48-c4c1-4e70-9acc-086b39073506",
                "rel": "self"
            },
            {
                "href":
"http://23.253.248.171:8776/bab7d5c60cd041a0a36f7c4b6e1dd978/volumes/173f7b48-c4c1-4e70-9acc-086b39073506",
                "rel": "bookmark"
            }
        ],
        "availability_zone": "nova",
        "os-vol-host-attr:host": "difleming@lvmdriver-1#lvmdriver-1",
        "encrypted": false,
        "replication_status": "disabled",
        "snapshot_id": null,
        "id": "173f7b48-c4c1-4e70-9acc-086b39073506",
        "size": 1,

```

```

        "user_id": "32779452fcd34ae1a53a797ac8a1e064",
        "os-vol-tenant-attr:tenant_id":
"bab7d5c60cd041a0a36f7c4b6e1dd978",
        "os-vol-mig-status-attr:migstat": null,
        "metadata": {},
        "status": "available",
        "volume_image_metadata": {
            "kernel_id": "8a55f5f1-78f7-4477-8168-977d8519342c",
            "checksum": "eb9139e4942121f22bbc2afc0400b2a4",
            "min_ram": "0",
            "ramdisk_id": "5f6bdf8a-92db-4988-865b-60bdd808d9ef",
            "disk_format": "ami",
            "image_name": "cirros-0.3.4-x86_64-uec",
            "image_id": "b48c53e1-9a96-4a5a-a630-2e74ec54ddcc",
            "container_format": "ami",
            "min_disk": "0",
            "size": "25165824"
        },
        "description": "",
        "multiattach": false,
        "source_vol_id": null,
        "consistencygroup_id": null,
        "os-vol-mig-status-attr:name_id": null,
        "name": "test-volume",
        "bootable": "true",
        "created_at": "2015-11-29T02:25:18.000000",
        "volume_type": "lvmdriver-1"
    }
],
    "volumes_links": [{
        "href":
"https://158.69.65.111/volume/v3/4ad9f06ab8654e40befa59a2e7cac86d/volumes/detail?limit=1&marker=3b451d5d-9358-4a7e-a746-c6fd8b0e1462",
        "rel": "next"
    }],
    "count": 10
}

```

Create a volume POST /v3/{project_id}/volumes

To create a bootable volume, include the UUID of the image from which you want to create the volume in the `imageRef` attribute in the request body.

Preconditions

- You must have enough volume storage quota remaining to create a volume of size requested.

Asynchronous Postconditions

- With correct permissions, you can see the volume status as `available` through API calls.
- With correct access, you can see the created volume in the storage system that OpenStack Block Storage manages.

Troubleshooting

- If volume status remains `creating` or shows another error status, the request failed. Ensure you meet the preconditions then investigate the storage back end.
- Volume is not created in the storage system that OpenStack Block Storage manages.
- The storage node needs enough free storage space to match the size of the volume creation request.

Response codes

Success

Code	Reason
<code>202 - Accepted</code>	Request is accepted, but processing may take some time.

Request

Name	In	Type	Description
project_id	path	string	The UUID of the project in a multi-tenancy cloud.
volume	body	object	A <code>volume</code> object.
size	body	integer	The size of the volume, in gibibytes (GiB).
availability_zone (Optional)	body	string	The name of the availability zone.
source_volid (Optional)	body	string	The UUID of the source volume. The API creates a new volume with the same size as the source volume unless a larger size is requested.
description (Optional)	body	string	The volume description.
multiattach (Optional)	body	boolean	To enable this volume to attach to more than one server, set this value to <code>true</code> . Default is <code>false</code> . Note that support for multiattach volumes depends on the volume type being used. See valid boolean values
snapshot_id (Optional)	body	string	To create a volume from an existing snapshot, specify the UUID of the volume snapshot. The volume is created in same availability zone and with same size as the snapshot.
backup_id (Optional)	body	string	The UUID of the backup. New in version 3.47
name (Optional)	body	string	The volume name.
imageRef (Optional)	body	string	The UUID of the image from which you want to create the volume. Required to create a bootable volume.
volume_type (Optional)	body	string	The volume type (either name or ID). To create an environment with multiple-storage back ends, you must specify a volume type. Block Storage volume back ends are spawned as children to <code>cinder-volume</code> , and they are keyed from a unique queue. They are named <code>cinder-volume.HOST.BACKEND</code> . For example, <code>cinder-volume.ubuntu.lvmdriver</code> . When a volume is created, the scheduler chooses an appropriate back end to handle the request based on the volume type. Default is <code>None</code> . For information about how to use volume types to create multiple- storage back ends, see Configure multiple-storage back ends .
metadata (Optional)	body	object	One or more metadata key and value pairs to be associated with the new volume.
consistencygroup_id	body	string	The UUID of the consistency group.
OS-SCH-HNT:scheduler_hints (Optional)	body	object	The dictionary of data to send to the scheduler.

Request Example

```
{
```

```

"volume": {
  "size": 10,
  "availability_zone": null,
  "source_volid": null,
  "description": null,
  "multiattach": false,
  "snapshot_id": null,
  "backup_id": null,
  "name": null,
  "imageRef": null,
  "volume_type": null,
  "metadata": {},
  "consistencygroup_id": null
},
"OS-SCH-HNT:scheduler_hints": {
  "same_host": [
    "a0cf03a5-d921-4877-bb5c-86d26cf818e1",
    "8c19174f-4220-44f0-824a-cd1eeef10287"
  ]
}
}

```

Response Parameters

Name	In	Type	Description
migration_status	body	string	The volume migration status.
attachments	body	array	Instance attachment information. If this volume is attached to a server instance, the attachments list includes the UUID of the attached server, an attachment UUID, the name of the attached host, if any, the volume UUID, the device, and the device UUID. Otherwise, this list is empty.
links	body	array	The volume links.
availability_zone (Optional)	body	string	The name of the availability zone.
encrypted	body	boolean	If true, this volume is encrypted.
updated_at	body	string	The date and time when the resource was updated. The date and time stamp format is ISO 8601 : CCYY-MM-DDThh:mm:ss±hh:mm. For example, 2015-08-27T09:49:58-05:00. The ±hh:mm value, if included, is the time zone as an offset from UTC. In the previous example, the offset value is -05:00. If the updated_at date and time stamp is not set, its value is null.
replication_status	body	string	The volume replication status.

snapshot_id (Optional)	body	string	To create a volume from an existing snapshot, specify the UUID of the volume snapshot. The volume is created in same availability zone and with same size as the snapshot.
id	body	string	The UUID of the volume.
size	body	integer	The size of the volume, in gibibytes (GiB).
user_id	body	string	The UUID of the user.
metadata	body	object	A <code>metadata</code> object. Contains one or more metadata key and value pairs that are associated with the volume.
status	body	string	The volume status.
description	body	string	The volume description.
multiattach	body	boolean	If true, this volume can attach to more than one instance.
source_vol_id (Optional)	body	string	The UUID of the source volume. The API creates a new volume with the same size as the source volume unless a larger size is requested.
volume	body	object	A <code>volume</code> object.
consistencygroup_id	body	string	The UUID of the consistency group.
name	body	string	The volume name.
bootable	body	string	Enables or disables the bootable attribute. You can boot an instance from a bootable volume.
created_at	body	string	The date and time when the resource was created. The date and time stamp format is ISO 8601 : <code>CCYY-MM-DDThh:mm:ss±hh:mm</code> . For example, <code>2015-08-27T09:49:58-05:00</code> . The <code>±hh:mm</code> value, if included, is the time zone as an offset from UTC.
volume_type	body	string	The associated volume type for the volume.

Response Example

```
{
  "volume": {
    "status": "creating",
    "migration_status": null,
    "user_id": "0eea4eabcf184061a3b6db1e0daaf010",
    "attachments": [],
    "links": [
      {
```

```

        "href":
"http://23.253.248.171:8776/v3/bab7d5c60cd041a0a36f7c4b6e1dd978/volumes/6edbc2
f4-1507-44f8-ac0d-eed1d2608d38",
        "rel": "self"
    },
    {
        "href":
"http://23.253.248.171:8776/bab7d5c60cd041a0a36f7c4b6e1dd978/volumes/6edbc2f4-
1507-44f8-ac0d-eed1d2608d38",
        "rel": "bookmark"
    }
],
"availability_zone": "nova",
"bootable": "false",
"encrypted": false,
"created_at": "2015-11-29T03:01:44.000000",
"description": null,
"updated_at": null,
"volume_type": "lvmdriver-1",
"name": "test-volume-attachments",
"replication_status": "disabled",
"consistencygroup_id": null,
"source_volid": null,
"snapshot_id": null,
"multiattach": false,
"metadata": {},
"id": "6edbc2f4-1507-44f8-ac0d-eed1d2608d38",
"size": 2
}
}

```

List accessible volumes GET /v3/{project_id}/volumes

Lists summary information for all Block Storage volumes that the project can access, since v3.31 if non-admin users specify invalid filters in the url, API will return bad request.

Response codes

Success

Code	Reason
200 - OK	Request was successful.

Error

Code	Reason
400 - Bad Request	Some content in the request was invalid.

Request

Name	In	Type	Description
project_id	path	string	The UUID of the project in a multi-tenancy cloud.
all_tenants (Optional)	query	string	Shows details for all project. Admin only.
sort (Optional)	query	string	Comma-separated list of sort keys and optional sort directions in the form of < key > [: < direction >]. A valid direction is <code>asc</code> (ascending) or <code>desc</code> (descending).
limit (Optional)	query	integer	Requests a page size of items. Returns a number of items up to a limit value. Use the <code>limit</code> parameter to make an initial limited request and use the ID of the last-seen item from the response as the <code>marker</code> parameter value in a subsequent limited request.
offset (Optional)	query	integer	Used in conjunction with <code>limit</code> to return a slice of items. <code>offset</code> is where to start in the list.
marker (Optional)	query	string	The ID of the last-seen item. Use the <code>limit</code> parameter to make an initial limited request and use the ID of the last-seen item from the response as the <code>marker</code> parameter value in a subsequent limited request.
with_count (Optional)	query	boolean	Whether to show <code>count</code> in API response or not, default is <code>False</code> . New in version 3.45

Response Parameters

Name	In	Type	Description
volumes	body	array	A list of <code>volume</code> objects.
id	body	string	The UUID of the volume.
links	body	array	The volume links.
name	body	string	The volume name.
volumes_links (Optional)	body	array	The volume links.
count (Optional)	body	integer	The total count of requested resource before pagination is applied. New in version 3.45

Response Example

```
{
  "volumes": [
    {
      "id": "45baf976-c20a-4894-a7c3-c94b7376bf55",
      "links": [
        {
          "href":
"http://localhost:8776/v3/0c2eba2c5af04d3f9e9d0d410b371fde/volumes/45baf976-c20a-4894-a7c3-c94b7376bf55",
          "rel": "self"
        },
        {
          "href":
"http://localhost:8776/0c2eba2c5af04d3f9e9d0d410b371fde/volumes/45baf976-c20a-4894-a7c3-c94b7376bf55",
          "rel": "bookmark"
        }
      ],
      "name": "vol-004"
    },
    {
      "id": "5aa119a8-d25b-45a7-8d1b-88e127885635",
      "links": [
        {
          "href":
"http://localhost:8776/v3/0c2eba2c5af04d3f9e9d0d410b371fde/volumes/5aa119a8-d25b-45a7-8d1b-88e127885635",
          "rel": "self"
        },
        {
          "href":
"http://localhost:8776/0c2eba2c5af04d3f9e9d0d410b371fde/volumes/5aa119a8-d25b-45a7-8d1b-88e127885635",
          "rel": "bookmark"
        }
      ],
      "name": "vol-003"
    }
  ],
  "volumes_links": [{
    "href":
"https://158.69.65.111/volume/v3/4ad9f06ab8654e40befa59a2e7cac86d/volumes/detail?limit=1&marker=3b451d5d-9358-4a7e-a746-c6fd8b0e1462",
    "rel": "next"
  }],
  "count": 10
}
```

Show a volume's details GET

/v3/{project_id}/volumes/{volume_id}

Preconditions

- The volume must exist.

Response codes

Success

Code	Reason
200 - OK	Request was successful.

Request

Name	In	Type	Description
project_id	path	string	The UUID of the project in a multi-tenancy cloud.
volume_id	path	string	The UUID of the volume.

Response Parameters

Name	In	Type	Description
migration_status	body	string	The volume migration status.
attachments	body	array	Instance attachment information. If this volume is attached to a server instance, the attachments list includes the UUID of the attached server, an attachment UUID, the name of the attached host, if any, the volume UUID, the device, and the device UUID. Otherwise, this list is empty.
links	body	array	The volume links.
availability_zone (Optional)	body	string	The name of the availability zone.
os-vol-host-attr:host	body	string	Current back-end of the volume. Host format is <code>host@backend#pool</code> .
encrypted	body	boolean	If true, this volume is encrypted.
updated_at	body	string	The date and time when the resource was updated. The date and time stamp format is ISO 8601 : <code>CCYY-MM-DDThh:mm:ss±hh:mm</code> . For example, <code>2015-08-27T09:49:58-05:00</code> . The <code>±hh:mm</code> value, if included, is the time zone as an offset from UTC. In the previous example, the offset value is <code>-05:00</code> . If the <code>updated_at</code> date and time stamp is not set, its value is <code>null</code> .

replication_status	body	string	The volume replication status.
snapshot_id (Optional)	body	string	To create a volume from an existing snapshot, specify the UUID of the volume snapshot. The volume is created in same availability zone and with same size as the snapshot.
id	body	string	The UUID of the volume.
size	body	integer	The size of the volume, in gibibytes (GiB).
user_id	body	string	The UUID of the user.
os-vol-tenant-attr:tenant_id	body	string	The project ID which the volume belongs to.
os-vol-mig-status-attr:migstat	body	string	The status of this volume migration (None means that a migration is not currently in progress).
metadata	body	object	A <code>metadata</code> object. Contains one or more metadata key and value pairs that are associated with the volume.
status	body	string	The volume status.
volume_image_metadata (Optional)	body	object	List of image metadata entries. Only included for volumes that were created from an image, or from a snapshot of a volume originally created from an image.
description	body	string	The volume description.
multiattach	body	boolean	If true, this volume can attach to more than one instance.
source_volid (Optional)	body	string	The UUID of the source volume. The API creates a new volume with the same size as the source volume unless a larger size is requested.
volume	body	object	A <code>volume</code> object.
consistencygroup_id	body	string	The UUID of the consistency group.
os-vol-mig-status-attr:name_id	body	string	The volume ID that this volume name on the back- end is based on.
name	body	string	The volume name.
bootable	body	string	Enables or disables the bootable attribute. You can boot an instance from a bootable volume.
created_at	body	string	The date and time when the resource was created.The date and time stamp format is ISO 8601 : CCYY-MM-DDThh:mm:ss±hh:mm For example, 2015-08-27T09:49:58-05:00.The ±hh:mm value, if included, is the time zone as an offset from UTC.
volume_type	body	string	The associated volume type for the volume.
service_uuid	body	string	A unique identifier that's used to indicate what node the volume-service for a particular volume is being serviced by.
shared_targets	body	boolean	An indicator whether the back-end hosting the volume utilizes shared_targets or not. Default=True.

Response Example

```
{
  "volume": {
    "status": "available",
    "attachments": [],
    "links": [
      {
        "href":
"http://localhost:8776/v3/0c2eba2c5af04d3f9e9d0d410b371fde/volumes/5aa119a8-d25b-45a7-8d1b-88e127885635",
        "rel": "self"
      },
      {
        "href":
"http://localhost:8776/0c2eba2c5af04d3f9e9d0d410b371fde/volumes/5aa119a8-d25b-45a7-8d1b-88e127885635",
        "rel": "bookmark"
      }
    ],
    "availability_zone": "nova",
    "bootable": "false",
    "os-vol-host-attr:host": "ip-10-168-107-25",
    "source_vol_id": null,
    "snapshot_id": null,
    "id": "5aa119a8-d25b-45a7-8d1b-88e127885635",
    "description": "Super volume.",
    "name": "vol-002",
    "created_at": "2013-02-25T02:40:21.000000",
    "volume_type": null,
    "os-vol-tenant-attr:tenant_id": "0c2eba2c5af04d3f9e9d0d410b371fde",
    "size": 1,
    "metadata": {
      "contents": "not junk"
    }
  }
}
```

Delete a volume DELETE

/v3/{project_id}/volumes/{volume_id}

Preconditions

- Volume status must be `available`, `in-use`, `error`, `error_restoring`, `error_extending`, `error_managing`, and must not be migrating, attached, belong to a group or have snapshots.
- You cannot already have a snapshot of the volume.
- You cannot delete a volume that is in a migration.

Asynchronous Postconditions

- The volume is deleted in volume index.
- The volume managed by OpenStack Block Storage is deleted in storage node.

Troubleshooting

- If volume status remains in `deleting` or becomes `error_deleting` the request failed.
Ensure you meet the preconditions then investigate the storage back end.
- The volume managed by OpenStack Block Storage is not deleted from the storage system.

Response codes

Success

Code	Reason
<code>202 - Accepted</code>	Request is accepted, but processing may take some time.

Request

Name	In	Type	Description
<code>project_id</code>	path	string	The UUID of the project in a multi-tenancy cloud.
<code>volume_id</code>	path	string	The UUID of the volume.
<code>cascade</code> (Optional)	path	boolean	Remove any snapshots along with the volume. Default=False.
<code>force</code> (Optional)	path	boolean	Indicates whether to force delete a volume even if the volume is in <code>deleting</code> or <code>error_deleting</code> . Default is <code>false</code> . New in version 3.23