



# OpenStack API Documentation



OpenStack APIs



## octavia

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### Octavia API v2 (Current)

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## General API Overview

This section introduces readers to OpenStack Octavia v2 ReSTful HTTP API and provides guidelines on how to use it.

### Note

To clarify the Octavia API versioning we have updated the endpoint to support both the previously documented /v2.0 and the new path of /v2. They are exactly the same API and /v2.0 will be a supported alias for the life of the v2 API.

## Service Endpoints

All API calls described throughout the rest of this document require authentication with the [OpenStack Identity service](#). After authentication, the base **endpoint URL** for the **service type** of **load-balancer** and **service name** of **octavia** can be extracted from the service catalog returned with the identity token.

### Example token snippet with service catalog

```
{
  "token": {
    "catalog": [
      {
        "endpoints": [
          {
            "url": "http://198.51.100.10:9876/",
            "interface": "public",
            "region": "RegionOne",
            "region_id": "RegionOne",
            "id": "cd1c3c2dc6434c739ed0a12015373754"
          }
        ],
        "type": "load-balancer",
        "id": "1209701aec3d453e9803119cd28cb013",
        "name": "octavia"
      }
    ]
  }
}
```

For instance, if the **endpoint URL** is `http://198.51.100.10:9876/` then the full API call for `/v2/lbaas/loadbalancers` is

`http://198.51.100.10:9876/v2/lbaas/loadbalancers`.

Depending on the deployment, the **load-balancer endpoint URL** might be http or https, a custom port, a custom path, and include your project id. The only way to know the URLs for your deployment is by using the service catalog. The **load-balancer**

	Remove a L7 Policy
L7 Rules	
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Quotas	
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Flavors	
	List Flavors
	Create Flavor
	Show Flavor Details
	Update a Flavor
	Remove a Flavor
Flavor Profiles	
	List Flavor Profiles
	Create Flavor Profile
	Show Flavor Profile ...
	Update a Flavor Prof...
	Remove a Flavor Pro...
Availability Zones	
	List Availability Zones
	Create Availability Z...
	Show Availability Zo...
	Update an Availability...
	Remove an Availability...
Availability Zone Profiles	
	List Availability Zone...
	Create Availability Z...
	Show Availability Zo...
	Update a Availability...
	Remove a Availability...
Amphorae	
	List Amphora
	Show Amphora deta...
	Show Amphora Stati...
	Configure Amphora
	Failover Amphora
	Remove an Amphora

---

**endpoint URL** should never be hard coded in applications, even if they are only expected to work at a single site. It should always be discovered from the Identity token.

As such, for the rest of this document we will be using short hand where **GET /v2/lbaas/loadbalancers** really means **GET {your\_load-balancer\_endpoint\_URL}/v2/lbaas/loadbalancers**.

## Neutron-lbaas and Octavia v2 APIs

The Octavia v2 API is fully backward compatible with the neutron-lbaas v2 API and is a superset of the neutron-lbaas v2 API. This is intended to provide a simple migration path for deployments currently using the neutron-lbaas v2 API. You can update the endpoint your application is using from the keystone service catalog to use the **octavia** endpoint instead of the **neutron** endpoint for load balancer activities.

During the neutron-lbaas deprecation period a pass-through proxy will be included in neutron to allow requests via neutron and the neutron-lbaas v2 API to continue to function. Users are strongly encouraged to update their applications to access load balancing via the Octavia v2 API.

### **⚠ Warning**

Load balancing functions accessed via the **neutron** endpoint are deprecated and will be removed in a future release. Users are strongly encouraged to migrate to using the **octavia** endpoint.

## Authentication and authorization

The Octavia API v2 uses the [OpenStack Identity service](#) as the default authentication service. When Keystone is enabled, users that submit requests to the Octavia service must provide an authentication token in **X-Auth-Token** request header. You obtain the token by authenticating to the Keystone endpoint.

When Keystone is enabled, the **project\_id** attribute is not required in create requests because the project ID is derived from the authentication token.

The default authorization settings allow only administrative users to create resources on behalf of a different project.

Octavia uses information received from Keystone to authorize user requests. Octavia Networking handles the following types of authorization policies:

- **Operation-based policies** specify access criteria for specific operations, possibly with fine-grained control over specific attributes.
- **Resource-based policies** access a specific resource. Permissions might or might not be granted depending on the permissions configured for the resource. Currently available for only the network resource.

The actual authorization policies enforced in Octavia might vary from deployment to deployment.

## Request and response formats

The Octavia API v2 supports JSON data serialization request and response formats only.

### Request format

The Octavia API v2 only accepts requests with the JSON data serialization format. The request must have no **Accept** header or an **Accept** header that is compatible with **application/json**. The one exception is the Oslo middleware healthcheck endpoint.

### Response format

The Octavia API v2 always responds with the JSON data serialization format. The one exception is the Oslo middleware healthcheck endpoint.

### Query extension

A `.json` extension can be added to the request URI. For example, the `.json` extension in the following requests are equivalent:

- **GET** `publicURL/loadbalancers`
- **GET** `publicURL/loadbalancers.json`

## Filtering and column selection

The Octavia API v2 supports filtering based on all top level attributes of a resource. Filters are applicable to all list requests.

For example, the following request returns all loadbalancers named `foobar`:

```
GET /v2/lbaas/loadbalancers?name=foobar
```

When you specify multiple filters, the Octavia API v2 returns only objects that meet all filtering criteria. The operation applies an AND condition among the filters.

### Note

Octavia does not offer an OR mechanism for filters.

Alternatively, you can issue a distinct request for each filter and build a response set from the received responses on the client-side.

## Filtering by Tags

### New in version 2.5

Most Octavia resources support adding tags to the resource attributes. Octavia supports advanced filtering using these tags. The following tag filters are supported by the Octavia API:

- **tags** - Return the list of entities that have this tag or tags.
- **tags-any** - Return the list of entities that have one or more of the given tags.
- **not-tags** - Return the list of entities that do not have one or more of the given tags.
- **not-tags-any** - Return the list of entities that do not have at least one of the given tags.

When supplying a list of tags, the tags should be provided in a comma separated list.

For example, if you would like to get the list of load balancers with both the "red" and "blue" tags you would request:

```
GET /v2/lbaas/loadbalancers?tags=red,blue
```

To get a list of load balancers that have the "red" or "blue" tag, you would request:

```
GET /v2/lbaas/loadbalancers?tags-any=red,blue
```

For a list of load balancers that do not have the "red" tag, you would request:

```
GET /v2/lbaas/loadbalancers?not-tags=red
```

To get a list of load balancers that don't have either the "red" or "blue" tag you would request:

```
GET /v2/lbaas/loadbalancers?not-tags-any=red,blue
```

Tag filters can also be combined in the same request:

```
GET /v2/lbaas/loadbalancers?tags=red,blue&tags-any=green,orange
```

## Column Selection

By default, Octavia returns all attributes for any show or list call. The Octavia API v2 has a mechanism to limit the set of attributes returned. For example, return **id**.

You can use the **fields** query parameter to control the attributes returned from the Octavia API v2.

For example, the following request returns only **id** and **name** for each load balancer:

```
GET /v2/lbaas/loadbalancers.json?fields=id&fields=name
```

## Synchronous versus asynchronous plug-in behavior

The Octavia API v2 presents a logical model of load balancers consisting of listeners, pools, and members. It is up to the OpenStack Octavia plug-in to communicate with the underlying infrastructure to ensure load balancing is consistent with the logical model. A plug-in might perform these operations asynchronously.

When an API client modifies the logical model by issuing an HTTP **POST**, **PUT**, or **DELETE** request, the API call might return before the plug-in modifies underlying virtual and physical load balancing devices. However, an API client is guaranteed that all subsequent API calls properly reflect the changed logical model.

For example, if a client issues an HTTP **PUT** request to set the weight of a member, there is no guarantee that the new weight will be in effect when the HTTP call returns. This is indicated by an HTTP response code of 202.

You can use the **provisioning\_status** attribute to determine whether the Octavia plug-in has successfully completed the configuration of the resource.

## Bulk-create

The Octavia v2 API does not support bulk create. You cannot create more than one load balancer per API call.

The Octavia v2 API does support single call create which allows you to create a fully populated load balancer in one API call. This is discussed in the load balancer create section of this reference.

## Pagination

To reduce load on the service, list operations will return a maximum number of items at a time. To navigate the collection, the parameters **limit**, **marker** and **page\_reverse** can be set in the URI. For example:

```
?limit=100&marker=1234&page_reverse=False
```

The `marker` parameter is the ID of the last item in the previous list. The `limit` parameter sets the page size. The `page_reverse` parameter sets the page direction. These parameters are optional. If the client requests a limit beyond the maximum limit configured by the deployment, the server returns the maximum limit number of items.

For convenience, list responses contain atom “next” links and “previous” links. The last page in the list requested with ‘`page_reverse=False`’ will not contain “next” link, and the last page in the list requested with ‘`page_reverse=True`’ will not contain “previous” link. The following examples illustrate two pages with three items. The first page was retrieved through:

```
GET http://198.51.100.10:9876/v2/lbaas/loadbalancers.json?limit=2
```

If a particular plug-in does not support pagination operations the Octavia API v2 will emulate the pagination behavior so that users can expect the same behavior regardless of the particular plug-in running in the background.

#### Example load balancer list, first page: JSON request

```
GET /v2/lbaas/loadbalancers.json?limit=2 HTTP/1.1
Host: 198.51.100.10:9876
Content-Type: application/json
Accept: application/json
```

#### Example load balancer list, first page: JSON response

```
{
  "loadbalancers": [
    {
      "admin_state_up": true,
      "listeners": [],
      "vip_subnet_id": "08dce793-daeF-411d-a896-d389cd45b1ea",
      "pools": [],
      "provider": "octavia",
      "description": "Best App load balancer 1",
      "name": "bestapplb1",
      "operating_status": "ONLINE",
      "id": "34d5f4a5-cbbc-43a0-878f-b8a26370e6e7",
      "provisioning_status": "ACTIVE",
      "vip_port_id": "1e20d91d-8df9-4c15-9778-28bc89226c19",
      "vip_address": "203.0.113.10",
      "project_id": "bf325b04-e7b1-4002-9b10-f4984630367f"
    },
    {
      "admin_state_up": true,
      "listeners": [],
      "vip_subnet_id": "08dce793-daeF-411d-a896-d389cd45b1ea",
      "pools": [],
      "provider": "octavia",
      "description": "Second Best App load balancer 1",
      "name": "2ndbestapplb1",
      "operating_status": "ONLINE",
      "id": "0fdb0ca7-0a38-4aea-891c-daaed40bcae",
      "provisioning_status": "ACTIVE",
      "vip_port_id": "21f7ac04-6824-4222-93cf-46e0d70607f9",
      "vip_address": "203.0.113.20",
      "project_id": "bf325b04-e7b1-4002-9b10-f4984630367f"
    }
  ],
  "loadbalancers_links": [
    {
      "href": "http://198.51.100.10:9876/v2/lbaas/loadbalancers.json?li
      "rel": "next"
    },
    {
      "href": "http://198.51.100.10:9876/v2/lbaas/loadbalancers.json?li
      "rel": "previous"
    }
  ]
}
```

```
        ]  
    }
```

The last page won't show the "next" links

#### Example load balancer list, last page: JSON request

```
GET /v2/lbaas/loadbalancers.json?limit=2&marker=4ef465f3-0233-44af-b93d-9d3ea  
Host: 198.51.100.10:9876  
Content-Type: application/json  
Accept: application/json
```

#### Example load balancer list, last page: JSON response

```
{  
    "loadbalancers": [  
        {  
            "admin_state_up": true,  
            "listeners": [],  
            "vip_subnet_id": "08dce793-daeF-411d-a896-d389cd45b1ea",  
            "pools": [],  
            "provider": "octavia",  
            "description": "Other App load balancer 1",  
            "name": "otherapplb1",  
            "operating_status": "ONLINE",  
            "id": "4ef465f3-0233-44af-b93d-9d3eae4daf85",  
            "provisioning_status": "ACTIVE",  
            "vip_port_id": "f777a1c7-7f59-4a36-ad34-24dfebaf19e6",  
            "vip_address": "203.0.113.50",  
            "project_id": "bf325b04-e7b1-4002-9b10-f4984630367f"  
        }  
    ],  
    "loadbalancers_links": [  
        {  
            "href": "http://198.51.100.10:9876/v2/lbaas/loadbalancers.json?li  
            "rel": "previous"  
        }  
    ]  
}
```

## Sorting

Sorting is determined through the use of the 'sort' query string parameter. The value of this parameter is a comma-separated list of sort keys. Sort directions can optionally be appended to each sort key, separated by the ':' character.

The supported sort directions are either 'asc' for ascending or 'desc' for descending.

The caller may (but is not required to) specify a sort direction for each key. If a sort direction is not specified for a key, then a default is set by the server.

For example:

- Only sort keys specified:
  - **sort=key1, key2, key3**
  - 'key1' is the first key, 'key2' is the second key, etc.
  - Sort directions are defaulted by the server
- Some sort directions specified:
  - **sort=key1:asc, key2, key3**
  - Any sort key without a corresponding direction is defaulted
  - 'key1' is the first key (ascending order), 'key2' is the second key (direction defaulted by the server), etc.
- Equal number of sort keys and directions specified:
  - **sort=key1:asc, key2:desc, key3:asc**

- Each key is paired with the corresponding direction
- 'key1' is the first key (ascending order), 'key2' is the second key (descending order), etc.

You can also use the `sort_key` and `sort_dir` parameters to sort the results of list operations. Currently sorting does not work with extended attributes of resource. The `sort_key` and `sort_dir` can be repeated, and the number of `sort_key` and `sort_dir` provided must be same. The `sort_dir` parameter indicates in which direction to sort. Acceptable values are `asc` (ascending) and `desc` (descending).

If a particular plug-in does not support sorting operations the Octavia API v2 emulates the sorting behavior so that users can expect the same behavior regardless of the particular plug-in that runs in the background.

## Response Codes

The following HTTP response status codes are used by the Octavia v2 API.

### Success

Code	Description
200	<ul style="list-style-type: none"> <li>The synchronous request was successful</li> </ul>
202	<ul style="list-style-type: none"> <li>The asynchronous request was accepted and is being processed</li> </ul>
204	<ul style="list-style-type: none"> <li>The request was successful, no content to return</li> <li>The entity was successfully deleted</li> </ul>

### Faults

The Octavia API v2 returns an error response if a failure occurs while processing a request. Octavia uses only standard HTTP error codes. *4nn* errors indicate problems in the particular request being sent from the client.

Code	Description
400	<ul style="list-style-type: none"> <li>Bad request</li> <li>Malformed request URI or body requested</li> <li>The request could not be understood</li> <li>Invalid values entered</li> <li>Bulk operations disallowed</li> <li>Validation failed</li> <li>Method not allowed for request body (such as trying to update attributes that can be specified at create-time only)</li> </ul>
401	<ul style="list-style-type: none"> <li>Unauthorized: Access is denied due to invalid credentials</li> </ul>
403	<ul style="list-style-type: none"> <li>Policy does not allow current user to do this operation</li> <li>The project is over quota for the request</li> </ul>
404	<ul style="list-style-type: none"> <li>Not Found</li> <li>Non existent URI</li> <li>Resource not found</li> </ul>
409	<ul style="list-style-type: none"> <li>Conflict</li> <li>The resource is in an immutable state</li> </ul>
500	<ul style="list-style-type: none"> <li>Internal server error</li> </ul>
503	<ul style="list-style-type: none"> <li>Service unavailable</li> <li>The project is busy with other requests, try again later</li> </ul>

## Status Codes

Octavia API v2 entities have two status codes present in the response body. The **provisioning\_status** describes the lifecycle status of the entity while the **operating\_status** provides the observed status of the entity.

For example, a member may be in a **provisioning\_status** of **PENDING\_UPDATE** and have an **operating\_status** of **ONLINE**. This would indicate that an update operation is occurring on this member and it is in an immutable state but it is healthy and able to service requests. This situation could occur if the user made a request to update the weight of the member.

### Operating Status Codes

Code	Description
ONLINE	<ul style="list-style-type: none"><li>Entity is operating normally</li><li>All pool members are healthy</li></ul>
DRAINING	<ul style="list-style-type: none"><li>The member is not accepting new connections</li></ul>
OFFLINE	<ul style="list-style-type: none"><li>Entity is administratively disabled</li></ul>
DEGRADED	<ul style="list-style-type: none"><li>One or more of the entity's components are in ERROR</li></ul>
ERROR	<ul style="list-style-type: none"><li>The entity has failed</li><li>The member is failing its health monitoring checks</li><li>All of the pool members are in ERROR</li></ul>
NO_MONITOR	<ul style="list-style-type: none"><li>No health monitor is configured for this entity and its status is unknown</li></ul>

### Provisioning Status Codes

Code	Description
ACTIVE	<ul style="list-style-type: none"><li>The entity was provisioned successfully</li></ul>
DELETED	<ul style="list-style-type: none"><li>The entity has been successfully deleted</li></ul>
ERROR	<ul style="list-style-type: none"><li>Provisioning failed</li></ul>
PENDING_CREATE	<ul style="list-style-type: none"><li>The entity is being created</li></ul>
PENDING_UPDATE	<ul style="list-style-type: none"><li>The entity is being updated</li></ul>
PENDING_DELETE	<ul style="list-style-type: none"><li>The entity is being deleted</li></ul>

Entities in a **PENDING\_\*** state are immutable and cannot be modified until the requested operation completes. The entity will return to the **ACTIVE** provisioning status once the asynchronous operation completes.

An entity in **ERROR** has failed provisioning. The entity may be deleted and recreated.

## Protocol Combinations (Listener/Pool)

The listener and pool can be associated through the listener's **default\_pool\_id** or l7policy's **redirect\_pool\_id**. Both listener and pool must set the protocol parameter, but the association between the listener and the pool isn't arbitrary and has some constraints on the protocol aspect.

### Valid protocol combinations

Listener Pool	HTTP	HTTP	HTTPS	SCTP	TCP	TERMINATED_HTTPS	UDP
HTTP	Y	N	N	Y		Y	N
HTTPS	N	Y	N	Y		N	N
PROXY	Y	Y	N	Y		Y	N
PROXYV2	Y	Y	N	Y		Y	N
SCTP	N	N	Y	N		N	N
TCP	N	Y	N	Y		N	N
UDP	N	N	N	N		N	Y

"Y" means the combination is valid and "N" means invalid.

The HTTPS protocol is HTTPS pass-through. For most providers, this is treated as a TCP protocol. Some advanced providers may support HTTPS session persistence features by using the session ID. The Amphora provider treats HTTPS as a TCP flow, but currently does not support HTTPS session persistence using the session ID.

The pool protocol of PROXY will use the listener protocol as the pool protocol but will wrap that protocol in the proxy protocol. In the case of listener protocol TERMINATED\_HTTPS, a pool protocol of PROXY will be HTTP wrapped in the proxy protocol.

## Protocol Combinations (Pool/Health Monitor)

Pools and health monitors are also related with regard to protocol. Pools set the protocol parameter for the real member connections, and the health monitor sets a type for health checks. Health check types are limited based on the protocol of the pool.

### Valid protocol combinations

Health Monitor Pool	HTTP	HTTP	HTTPS	PING	SCTP	TCP	TLS- HELLO	UDP- CONNECT
HTTP	Y	Y	Y	N	Y	Y		N
HTTPS	Y	Y	Y	N	Y	Y	Y	N
PROXY	Y	Y	Y	N	Y	Y	Y	N
PROXYV2	Y	Y	Y	N	Y	Y	Y	N
SCTP	Y	N	N	Y	Y	Y	N	Y
TCP	Y	Y	Y	N	Y	Y	Y	N
UDP	Y	N	N	Y	Y	Y	N	Y

"Y" means the combination is valid and "N" means invalid.

These combinations are mostly as you'd expect for all non-UDP/SCTP pool protocols: non-UDP/SCTP pools can have health monitors with any check type besides UDP-CONNECT and SCTP. For UDP or SCTP pools however, things are a little more complicated. UDP and SCTP Pools support UDP-CONNECT and SCTP but also HTTP and TCP checks. HTTPS checks are technically feasible but have not yet been implemented.

## Load Balancers

GET

/v2/lbaas/loadbalancers

### List Load Balancers

detail

Lists all load balancers for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list load balancers for other projects.

The list might be empty.

### Success

Code	Reason
<b>200 - OK</b>	Request was successful.

### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

### Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
project_id (Optional)	query	string	The ID of the project to query.

### Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/loc
```

### Response Parameters

Name	In	Type	Description
additional_vips (Optional)	body	array	A list of JSON objects defining “additional VIPs”. The format for these is <code>{"subnet_id": &lt;subnet_id&gt;, "ip_address": &lt;ip_address&gt;}</code> , where the <b>subnet_id</b> field is mandatory and the <b>ip_address</b> field is optional. Additional VIP subnets must all belong to the same network as the primary VIP.  <b>New in version 2.26</b>
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <code>true</code> ) or down ( <code>false</code> ).
availability_zone	body	object	An availability zone name.
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
flavor_id	body	uuid	The ID of the flavor.
id	body	uuid	The ID of the load balancer.
listeners	body	array	The associated listener IDs, if any.
loadbalancers	body	array	A list of <b>loadbalancer</b> objects.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pools	body	array	The associated pool IDs, if any.
project_id	body	string	The ID of the project owning this resource.
provider	body	string	Provider name for the load balancer.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource.  <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
vip_address	body	string	The IP address of the Virtual IP (VIP).
vip_network_id	body	uuid	The ID of the network for the Virtual IP (VIP).
vip_port_id	body	uuid	The ID of the Virtual IP (VIP) port.
vip_qos_policy_id	body	uuid	The ID of the QoS Policy which will apply to the Virtual IP (VIP).

Name	In	Type	Description
vip_subnet_id	body	uuid	The ID of the subnet for the Virtual IP (VIP).
vip_sg_ids	body	array	The list of Security Group IDs of the Virtual IP (VIP) port of the Load Balancer. <b>New in version 2.29</b>
vip_vnic_type	body	string	The VIP vNIC type used for the load balancer. One of <b>normal</b> or <b>direct</b> . <b>New in version 2.28</b>

## Response Example

```
{
  "loadbalancers": [
    {
      "description": "My favorite load balancer",
      "admin_state_up": true,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "provisioning_status": "ACTIVE",
      "flavor_id": "",
      "vip_subnet_id": "d4af86e1-0051-488c-b7a0-527f97490c9a",
      "listeners": [
        {
          "id": "023f2e34-7806-443b-bfae-16c324569a3d"
        }
      ],
      "vip_address": "203.0.113.50",
      "vip_network_id": "d0d217df-3958-4fbf-a3c2-8dad2908c709",
      "vip_port_id": "b4ca07d1-a31e-43e2-891a-7d14f419f342",
      "additional_vips": [],
      "provider": "octavia",
      "pools": [
        {
          "id": "9aa16cdc-8d18-47b9-aba9-ec044531a79f"
        }
      ],
      "created_at": "2017-02-28T00:41:44",
      "updated_at": "2017-02-28T00:43:30",
      "id": "607226db-27ef-4d41-ae89-f2a800e9c2db",
      "operating_status": "ONLINE",
      "name": "best_load_balancer",
      "vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",
      "availability_zone": "my_az",
      "tags": [],
      "vip_vnic_type": "normal"
    }
  ]
}
```

POST  
/v2/lbaas/loadbalancers  
**Create a Load Balancer**

[detail](#)

Creates a load balancer.

This operation provisions a new load balancer by using the configuration that you define in the request object. After the API validates the request and starts the provisioning process, the API returns a response object that contains a unique ID and the status of provisioning the load balancer.

In the response, the load balancer `provisioning_status` is **ACTIVE**, **PENDING\_CREATE**, or **ERROR**.

If the status is **PENDING\_CREATE**, issue GET `/v2/lbaas/loadbalancers/{loadbalancer_id}` to view the progress of the provisioning operation. When the load balancer status changes to **ACTIVE**, the load balancer is successfully provisioned and is ready for further configuration.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

Administrative users can specify a project ID that is different than their own to create load balancers for other projects.

An optional **flavor\_id** attribute can be used to create the load balancer using a pre-configured octavia flavor. Flavors are created by the operator to allow custom load balancer configurations, such as allocating more memory for the load balancer.

An optional **vip\_qos\_policy\_id** attribute from Neutron can be used to apply QoS policies on a loadbalancer VIP, also could pass a 'null' value to remove QoS policies.

You can also specify the **provider** attribute when you create a load balancer. The **provider** attribute specifies which backend should be used to create the load balancer. This could be the default provider (**octavia**) or a vendor supplied **provider** if one has been installed. Setting both a flavor\_id and a provider will result in a conflict error if the provider does not match the provider of the configured flavor profiles.

Specifying a Virtual IP (VIP) is mandatory. There are three ways to specify a VIP network for the load balancer:

1. Provide a **vip\_port\_id**.

Providing a neutron port ID for the **vip\_port\_id** tells octavia to use this port for the VIP. Some port settings may be changed or removed as required by octavia, but the IP address will be retained. If the port has more than one subnet you must specify either the **vip\_subnet\_id** or **vip\_address** to clarify which address should be used for the VIP.

2. Provide a **vip\_network\_id**.

When a **vip\_network\_ip** is specified, unless neither **vip\_subnet\_id** nor **vip\_address** is specified, octavia will select a subnet from the network, preferring IPv4 over IPv6 subnets.

3. Provide a **vip\_subnet\_id**.

Specifying a neutron subnet ID will tell octavia to create a neutron port on this subnet and allocate an IP address from the subnet if the **vip\_address** was not specified. If **vip\_address** was specified, octavia will attempt to allocate the **vip\_address** from the subnet for the VIP address.

Additional VIPs may also be specified in the **additional\_vips** field, by providing a list of JSON objects containing a **subnet\_id** and optionally an **ip\_address**. All additional subnets must be part of the same network as the primary VIP.

An optional **vip\_sg\_ids** attribute can be used to set custom Neutron Security Groups that are applied on the VIP port of the Load Balancer. When this option is used, Octavia does not manage the security of the Listeners, the user must set Security Group Rules to allow the network traffic on the VIP port. **vip\_sg\_ids** are incompatible with SR-IOV load balancer and cannot be set if the load balancer has a listener that uses **allowed\_cidrs**.

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
additional_vips (Optional)	body	array	<p>A list of JSON objects defining "additional VIPs". The format for these is <code>{"subnet_id": &lt;subnet_id&gt;, "ip_address": &lt;ip_address&gt;}</code>, where the <b>subnet_id</b> field is mandatory and the <b>ip_address</b> field is optional. Additional VIP subnets must all belong to the same network as the primary VIP.</p> <p><b>New in version 2.26</b></p>
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
availability_zone (Optional)	body	object	An availability zone name.
description (Optional)	body	string	A human-readable description for the resource.
flavor_id (Optional)	body	uuid	The ID of the flavor.
listeners (Optional)	body	array	The associated listener IDs, if any.
loadbalancer	body	object	A load balancer object.
name (Optional)	body	string	Human-readable name of the resource.
project_id (Optional)	body	string	The ID of the project owning this resource.

Name	In	Type	Description
provider (Optional)	body	string	Provider name for the load balancer. Default is <b>octavia</b> .
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
vip_address (Optional)	body	string	The IP address of the Virtual IP (VIP).
vip_network_id (Optional)	body	uuid	The ID of the network for the Virtual IP (VIP). One of <b>vip_network_id</b> , <b>vip_port_id</b> , or <b>vip_subnet_id</b> must be specified.
vip_port_id (Optional)	body	uuid	The ID of the Virtual IP (VIP) port. One of <b>vip_network_id</b> , <b>vip_port_id</b> , or <b>vip_subnet_id</b> must be specified.
vip_qos_policy_id (Optional)	body	uuid	The ID of the QoS Policy which will apply to the Virtual IP (VIP).
vip_subnet_id (Optional)	body	uuid	The ID of the subnet for the Virtual IP (VIP). One of <b>vip_network_id</b> , <b>vip_port_id</b> , or <b>vip_subnet_id</b> must be specified.
vip_sg_ids (Optional)	body	array	The list of Security Group IDs of the Virtual IP (VIP) port of the Load Balancer. <b>New in version 2.29</b>

## Request Example

```
{
  "loadbalancer": {
    "description": "My favorite load balancer",
    "admin_state_up": true,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "vip_subnet_id": "d4af86e1-0051-488c-b7a0-527f97490c9a",
    "vip_address": "203.0.113.50",
    "additional_vips": [
      {"subnet_id": "3ca40b2e-c286-4e53-bdb9-dd01c8a0ad6d", "ip_address": "44d92b92-510f-4c05-8058-bf5a17b4d41c"}
    ],
    "provider": "octavia",
    "name": "best_load_balancer",
    "vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",
    "availability_zone": "my_az",
    "tags": ["test_tag"]
  }
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
additional_vips (Optional)	body	array	A list of JSON objects defining “additional VIPs”. The format for these is <code>{"subnet_id": &lt;subnet_id&gt;, "ip_address": &lt;ip_address&gt;}</code> , where the <b>subnet_id</b> field is mandatory and the <b>ip_address</b> field is optional. Additional VIP subnets must all belong to the same network as the primary VIP.  <b>New in version 2.26</b>
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <code>true</code> ) or down ( <code>false</code> ).
availability_zone	body	object	An availability zone name.
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
flavor_id	body	uuid	The ID of the flavor.
id	body	uuid	The ID of the load balancer.
listeners	body	array	The associated listener IDs, if any.
loadbalancer	body	object	A load balancer object.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pools	body	array	The associated pool IDs, if any.
project_id	body	string	The ID of the project owning this resource.
provider	body	string	Provider name for the load balancer.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource.  <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
vip_address	body	string	The IP address of the Virtual IP (VIP).
vip_network_id	body	uuid	The ID of the network for the Virtual IP (VIP).
vip_port_id	body	uuid	The ID of the Virtual IP (VIP) port.
vip_qos_policy_id	body	uuid	The ID of the QoS Policy which will apply to the Virtual IP (VIP).

Name	In	Type	Description
vip_subnet_id	body	uuid	The ID of the subnet for the Virtual IP (VIP).
vip_sg_ids	body	array	<p>The list of Security Group IDs of the Virtual IP (VIP) port of the Load Balancer.</p> <p><b>New in version 2.29</b></p>
vip_vnic_type	body	string	<p>The VIP vNIC type used for the load balancer. One of <b>normal</b> or <b>direct</b>.</p> <p><b>New in version 2.28</b></p>

## Response Example

```
{  
  "loadbalancer": {  
    "description": "My favorite load balancer",  
    "admin_state_up": true,  
    "project_id": "e3cd678b11784734bc366148aa37580e",  
    "provisioning_status": "PENDING_CREATE",  
    "flavor_id": "",  
    "vip_subnet_id": "d4af86e1-0051-488c-b7a0-527f97490c9a",  
    "vip_address": "203.0.113.50",  
    "vip_network_id": "d0d217df-3958-4fbf-a3c2-8dad2908c709",  
    "vip_port_id": "b4ca07d1-a31e-43e2-891a-7d14f419f342",  
    "additional_vips": [  
      {"subnet_id": "3ca40b2e-c286-4e53-bdb9-dd01c8a0ad6d", "ip_address": "203.0.113.51"},  
      {"subnet_id": "44d92b92-510f-4c05-8058-bf5a17b4d41c", "ip_address": "203.0.113.52"}],  
    "provider": "octavia",  
    "created_at": "2017-02-28T00:41:44",  
    "updated_at": "2017-02-28T00:43:30",  
    "id": "607226db-27ef-4d41-ae89-f2a800e9c2db",  
    "operating_status": "OFFLINE",  
    "name": "best_load_balancer",  
    "vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",  
    "availability_zone": "my_az",  
    "tags": ["test_tag"],  
    "vip_vnic_type": "normal"  
  }  
}
```

# Creating a Fully Populated Load Balancer

You can configure all documented features of the load balancer at creation time by specifying the additional elements or attributes in the request.

Note: all pools must have names, and must only be fully defined once. To reference a pool from multiple objects, supply the pool name only for all subsequent references.

## Request Example

```
{  
  "loadbalancer": {  
    "description": "My favorite load balancer",  
    "admin_state_up": true,  
    "project_id": "e3cd678b11784734bc366148aa37580e",  
    "flavor_id": "",  
    "listeners": [  
      {  
        "name": "http_listener",  
        "protocol": "HTTP",  
        "protocol_port": 80,  
        "default_pool": {  
          "name": "rr_pool",  
          "protocol": "HTTP",  
          "lb_algorithm": "ROUND_ROBIN",  
          "healthmonitor": {  
            "type": "HTTP",  
            "delay": 10,  
            "timeout": 1000,  
            "max_retries": 10,  
            "retry_window": 120  
          }  
        }  
      }  
    ]  
  }  
}
```

```

        "delay": "3",
        "expected_codes": "200,201,202",
        "http_method": "GET",
        "max_retries": 2,
        "timeout": 1,
        "url_path": "/index.html"
    },
    "members": [
        {
            "address": "192.0.2.16",
            "protocol_port": 80
        },
        {
            "address": "192.0.2.19",
            "protocol_port": 80
        }
    ]
},
{
    "name": "https_listener",
    "protocol": "HTTPS",
    "protocol_port": 443,
    "default_pool": {
        "name": "https_pool"
    },
    "tags": ["test_tag"]
},
{
    "name": "redirect_listener",
    "protocol": "HTTP",
    "protocol_port": 8080,
    "l7policies": [
        {
            "action": "REDIRECT_TO_URL",
            "name": "redirect_policy",
            "redirect_url": "https://www.example.com/",
            "admin_state_up": true
        }
    ]
},
{
    "pools": [
        {
            "name": "https_pool",
            "protocol": "HTTPS",
            "lb_algorithm": "ROUND_ROBIN",
            "healthmonitor": {
                "type": "HTTPS",
                "delay": "3",
                "max_retries": 2,
                "timeout": 1
            },
            "members": [
                {
                    "address": "192.0.2.51",
                    "protocol_port": 80
                },
                {
                    "address": "192.0.2.52",
                    "protocol_port": 80
                }
            ]
        }
    ],
    "vip_subnet_id": "d4af86e1-0051-488c-b7a0-527f97490c9a",
    "vip_address": "203.0.113.50",
    "provider": "octavia",
    "name": "best_load_balancer",
    "vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",
    "availability_zone": "my_az",
    "tags": ["test_tag"]
}
}

```

## Response Example

```
{
    "loadbalancer": {

```

```

"description": "My favorite load balancer",
"admin_state_up": true,
"project_id": "e3cd678b11784734bc366148aa37580e",
"provisioning_status": "ACTIVE",
"flavor_id": "",
"vip_subnet_id": "d4af86e1-0051-488c-b7a0-527f97490c9a",
"listeners": [
{
    "l7policies": [],
    "protocol": "HTTP",
    "description": "",
    "default_tls_container_ref": null,
    "admin_state_up": true,
    "default_pool": {
        "id": "c8cec227-410a-4a5b-af13-ecf38c2b0abb"
    },
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "default_tls_container_id": null,
    "connection_limit": -1,
    "sni_container_refs": [],
    "protocol_port": 80,
    "id": "a99995c6-4f04-4ed3-a37f-ae58f6e7e5e1",
    "name": "http_listener"
},
{
    "l7policies": [],
    "protocol": "HTTPS",
    "description": "",
    "default_tls_container_ref": null,
    "admin_state_up": true,
    "default_pool": {
        "id": "b0577aff-c1f9-40c6-9a3b-7b1d2a669136"
    },
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "default_tls_container_id": null,
    "connection_limit": -1,
    "sni_container_refs": [],
    "protocol_port": 443,
    "id": "73c6c564-f215-48e9-91d6-f10bb3454954",
    "name": "https_listener",
    "tags": ["test_tag"]
},
{
    "l7policies": [
{
        "description": "",
        "admin_state_up": true,
        "rules": [],
        "project_id": "e3cd678b11784734bc366148aa37580e",
        "listener_id": "95de30ec-67f4-437b-b3f3-22c5d9ef9828",
        "redirect_url": "https://www.example.com/",
        "action": "REDIRECT_TO_URL",
        "position": 1,
        "id": "d0553837-f890-4981-b99a-f7cbd6a76577",
        "name": "redirect_policy"
    }
],
    "protocol": "HTTP",
    "description": "",
    "default_tls_container_ref": null,
    "admin_state_up": true,
    "default_pool": null,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "default_tls_container_id": null,
    "connection_limit": -1,
    "sni_container_refs": [],
    "protocol_port": 8080,
    "id": "95de30ec-67f4-437b-b3f3-22c5d9ef9828",
    "name": "redirect_listener"
}
],
    "vip_address": "203.0.113.50",
    "vip_network_id": "d0d217df-3958-4fbf-a3c2-8dad2908c709",
    "vip_port_id": "b4ca07d1-a31e-43e2-891a-7d14f419f342",
    "additional_vips": [],
    "provider": "octavia",
    "pools": [
{
        "lb_algorithm": "ROUND_ROBIN",
        "protocol": "HTTP",
        "description": "",
        "admin_state_up": true,

```

```

"project_id": "e3cd678b11784734bc366148aa37580e",
"session_persistence": null,
"healthmonitor": [
    {
        "name": "",
        "admin_state_up": true,
        "project_id": "e3cd678b11784734bc366148aa37580e",
        "delay": 3,
        "expected_codes": "200,201,202",
        "max_retries": 2,
        "http_method": "GET",
        "timeout": 1,
        "max_retries_down": 3,
        "url_path": "/index.html",
        "type": "HTTP",
        "id": "a8a2aa3f-d099-4752-8265-e6472f8147f9"
    },
    "members": [
        {
            "name": "",
            "weight": 1,
            "admin_state_up": true,
            "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
            "project_id": "e3cd678b11784734bc366148aa37580e",
            "address": "192.0.2.16",
            "protocol_port": 80,
            "id": "7d19ad6c-d549-453e-a5cd-05382c6be96a"
        },
        {
            "name": "",
            "weight": 1,
            "admin_state_up": true,
            "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
            "project_id": "e3cd678b11784734bc366148aa37580e",
            "address": "192.0.2.19",
            "protocol_port": 80,
            "id": "a167402b-caa6-41d5-b4d4-bde7f2cbfa5e"
        }
    ],
    "id": "c8cec227-410a-4a5b-af13-ecf38c2b0abb",
    "name": "rr_pool"
},
{
    "lb_algorithm": "ROUND_ROBIN",
    "protocol": "HTTPS",
    "description": "",
    "admin_state_up": true,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "session_persistence": null,
    "healthmonitor": [
        {
            "name": "",
            "admin_state_up": true,
            "project_id": "e3cd678b11784734bc366148aa37580e",
            "delay": 3,
            "expected_codes": "200,201,202",
            "max_retries": 2,
            "http_method": "GET",
            "timeout": 1,
            "max_retries_down": 3,
            "url_path": "/index.html",
            "type": "HTTPS",
            "id": "d5bb7712-26b7-4809-8c14-3b407c0cb00d"
        },
        "members": [
            {
                "name": "",
                "weight": 1,
                "admin_state_up": true,
                "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
                "project_id": "e3cd678b11784734bc366148aa37580e",
                "address": "192.0.2.51",
                "protocol_port": 80,
                "id": "f83832d5-1f22-45fa-866a-4abea36e0886"
            },
            {
                "name": "",
                "weight": 1,
                "admin_state_up": true,
                "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
                "project_id": "e3cd678b11784734bc366148aa37580e",
                "address": "192.0.2.52",
                "protocol_port": 80,
                "id": "f83832d5-1f22-45fa-866a-4abea36e0886"
            }
        ]
    ]
}

```

```

        }
    ],
    "id": "b0577aff-c1f9-40c6-9a3b-7b1d2a669136",
    "name": "https_pool"
}
],
"created_at": "2017-02-28T00:41:44",
"updated_at": "2017-02-28T00:43:30",
"id": "607226db-27ef-4d41-ae89-f2a800e9c2db",
"operating_status": "ONLINE",
"name": "best_load_balancer",
"vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",
"availability_zone": "my_az",
"tags": ["test_tag"],
"vip_vnic_type": "normal"
}
}

```

**GET**  
`/v2/lbaas/loadbalancers/ {loadbalancer_id}`  
**Show Load Balancer details**

**detail**

Shows the details of a load balancer.

If you are not an administrative user and the load balancer object does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

Name	In	Type	Description
loadbalancer_id	path	uuid	The ID of the load balancer to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/loadbalancers/12345678-1234-1234-1234-1234567890ab
```

## Response Parameters

Name	In	Type	Description
additional_vips (Optional)	body	array	A list of JSON objects defining "additional VIPs". The format for these is <code>{"subnet_id": &lt;subnet_id&gt;, "ip_address": &lt;ip_address&gt;}</code> , where the <code>subnet_id</code> field is mandatory and the <code>ip_address</code> field is optional. Additional VIP subnets must all belong to the same network as the primary VIP. <b>New in version 2.26</b>
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <code>true</code> ) or down ( <code>false</code> ).
availability_zone	body	object	An availability zone name.
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
flavor_id	body	uuid	The ID of the flavor.
id	body	uuid	The ID of the load balancer.
loadbalancer	body	object	A load balancer object.
listeners	body	array	The associated listener IDs, if any.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pools	body	array	The associated pool IDs, if any.
project_id	body	string	The ID of the project owning this resource.
provider	body	string	Provider name for the load balancer.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>

Name	In	Type	Description
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
vip_address	body	string	The IP address of the Virtual IP (VIP).
vip_network_id	body	uuid	The ID of the network for the Virtual IP (VIP).
vip_port_id	body	uuid	The ID of the Virtual IP (VIP) port.
vip_qos_policy_id	body	uuid	The ID of the QoS Policy which will apply to the Virtual IP (VIP).
vip_subnet_id	body	uuid	The ID of the subnet for the Virtual IP (VIP).
vip_sg_ids	body	array	The list of Security Group IDs of the Virtual IP (VIP) port of the Load Balancer. <b>New in version 2.29</b>
vip_vnic_type	body	string	The VIP vNIC type used for the load balancer. One of <b>normal</b> or <b>direct</b> . <b>New in version 2.28</b>

## Response Example

```
{
  "loadbalancer": {
    "description": "My favorite load balancer",
    "admin_state_up": true,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "provisioning_status": "PENDING_CREATE",
    "flavor_id": "",
    "vip_subnet_id": "d4af86e1-0051-488c-b7a0-527f97490c9a",
    "vip_address": "203.0.113.50",
    "vip_network_id": "d0d217df-3958-4fbf-a3c2-8dad2908c709",
    "vip_port_id": "b4ca07d1-a31e-43e2-891a-7d14f419f342",
    "additional_vips": [],
    "provider": "octavia",
    "created_at": "2017-02-28T00:41:44",
    "updated_at": "2017-02-28T00:43:30",
    "id": "8a562351-f0fb-424c-a0af-513461424ea5",
    "operating_status": "ONLINE",
    "name": "best_load_balancer",
    "vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",
    "availability_zone": "my_az",
    "tags": [],
    "vip_vnic_type": "normal"
  }
}
```

**PUT**  
**/v2/lbaas/loadbalancers/ {loadbalancer\_id}**  
**Update a Load Balancer**

detail

Updates a load balancer.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the update, check that the load balancer provisioning status is **ACTIVE**. If the status is **PENDING\_UPDATE**, use a GET operation to poll the load balancer object for changes.

This operation returns the updated load balancer object with the **ACTIVE**, **PENDING\_UPDATE**, or **ERROR** provisioning status.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
description (Optional)	body	string	A human-readable description for the resource.
loadbalancer	body	object	A load balancer object.
loadbalancer_id	path	uuid	The ID of the load balancer to query.
name (Optional)	body	string	Human-readable name of the resource.
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
vip_qos_policy_id (Optional)	body	uuid	The ID of the QoS Policy which will apply to the Virtual IP (VIP).

## Request Example

```
{
  "loadbalancer": {
    "description": "Temporarily disabled load balancer",
    "admin_state_up": false,
    "name": "disabled_load_balancer",
    "vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",
    "tags": ["updated_tag"]
  }
}
```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
additional_vips (Optional)	body	array	A list of JSON objects defining "additional VIPs". The format for these is <code>{"subnet_id": &lt;subnet_id&gt;, "ip_address": &lt;ip_address&gt;}</code> , where the <b>subnet_id</b> field is mandatory and the <b>ip_address</b> field is optional. Additional VIP subnets must all belong to the same network as the primary VIP. <b>New in version 2.26</b>
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
flavor_id	body	uuid	The ID of the flavor.
id	body	uuid	The ID of the load balancer.
listeners	body	array	The associated listener IDs, if any.
loadbalancer	body	object	A load balancer object.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pools	body	array	The associated pool IDs, if any.
project_id	body	string	The ID of the project owning this resource.
provider	body	string	Provider name for the load balancer.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
vip_address	body	string	The IP address of the Virtual IP (VIP).

Name	In	Type	Description
vip_network_id	body	uuid	The ID of the network for the Virtual IP (VIP).
vip_port_id	body	uuid	The ID of the Virtual IP (VIP) port.
vip_qos_policy_id	body	uuid	The ID of the QoS Policy which will apply to the Virtual IP (VIP).
vip_subnet_id	body	uuid	The ID of the subnet for the Virtual IP (VIP).
vip_sg_ids	body	array	The list of Security Group IDs of the Virtual IP (VIP) port of the Load Balancer. <b>New in version 2.29</b>
vip_vnic_type	body	string	The VIP vNIC type used for the load balancer. One of <b>normal</b> or <b>direct</b> . <b>New in version 2.28</b>

## Response Example

```
{
  "loadbalancer": {
    "description": "Temporarily disabled load balancer",
    "admin_state_up": false,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "provisioning_status": "PENDING_UPDATE",
    "flavor_id": "",
    "vip_subnet_id": "d4af86e1-0051-488c-b7a0-527f97490c9a",
    "vip_address": "203.0.113.50",
    "vip_network_id": "d0d217df-3958-4fbf-a3c2-8dad2908c709",
    "vip_port_id": "b4ca07d1-a31e-43e2-891a-7d14f419f342",
    "additional_vips": [],
    "provider": "octavia",
    "created_at": "2017-02-28T00:41:44",
    "updated_at": "2017-02-28T00:43:30",
    "id": "8b6fc468-07d5-4d8b-a0b9-695060e72c31",
    "operating_status": "ONLINE",
    "name": "disabled_load_balancer",
    "vip_qos_policy_id": "ec4f78ca-8da8-4e99-8a1a-e3b94595a7a3",
    "tags": ["updated_tag"],
    "vip_vnic_type": "normal"
  }
}
```

**DELETE**

/v2/lbaas/loadbalancers/ {loadbalancer\_id}

**Remove a Load Balancer**

detail

Removes a load balancer and its associated configuration from the project.

The optional parameter **cascade** when defined as **true** will delete all child objects of the load balancer.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
cascade (Optional)	query	boolean	If <b>true</b> will delete all child objects of the load balancer.
loadbalancer_id	path	uuid	The ID of the load balancer to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

```
GET  
/v2/lbaas/loadbalancers/ {loadbalancer_id} /stats  
Get Load Balancer statistics
```

detail

Shows the current statistics for a load balancer.

This operation returns the statistics of a load balancer object identified by `loadbalancer_id`.

If you are not an administrative user and the load balancer object does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
loadbalancer_id	path	uuid	The ID of the load balancer to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/loc
```

## Response Parameters

Name	In	Type	Description
stats	body	object	A statistics object.
active_connections	body	integer	The currently active connections.
bytes_in	body	integer	The total bytes received.
bytes_out	body	integer	The total bytes sent.
request_errors	body	integer	The total requests that were unable to be fulfilled.
total_connections	body	integer	The total connections handled.

## Response Example

```
{
  "stats": {
    "bytes_in": 131342840,
    "total_connections": 52378345,
    "active_connections": 97258,
    "bytes_out": 1549542372,
    "request_errors": 0
  }
}
```

GET  
/v2/lbaas/loadbalancers/ {loadbalancer\_id} /status  
**Get the Load Balancer status tree**

detail

Shows the status tree for a load balancer.

This operation returns a status tree for a load balancer object, by load balancer ID.

**provisioning\_status** is the status associated with lifecycle of the resource. See [Provisioning Status Codes](#) for descriptions of the status codes.

**operating\_status** is the observed status of the resource. See [Operating Status Codes](#) for descriptions of the status codes.

If you are not an administrative user and the load balancer object does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

If the operation succeeds, the returned element is a status tree that contains the load balancer and all provisioning and operating statuses for its children.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
loadbalancer_id	path	uuid	The ID of the load balancer to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/loc
```

## Response Parameters

Name	In	Type	Description
action	body	string	The action associated with the resource.
address	body	string	The IP address of the resource.
healthmonitor	body	object	The associated health monitor status object.
id	body	uuid	The ID of the resource.
l7policies	body	array	A list of L7 policy status objects.
l7rules	body	array	A list of L7 rule status objects.
listeners	body	array	A list of listener status objects.
loadbalancer	body	object	A load balancer status object.

Name	In	Type	Description
members	body	array	A list of members status objects.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pools	body	array	The list of pools status objects.
protocol_port	body	integer	The protocol port number for the resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
statuses	body	object	The status tree of a load balancer object contains all provisioning and operating statuses for its children.
type	body	string	The type associated with the resource.

## Response Example

```
{
  "statuses": {
    "loadbalancer": {
      "name": "excellent_load_balancer",
      "provisioning_status": "ACTIVE",
      "listeners": [
        {
          "name": "HTTP_listener",
          "provisioning_status": "ACTIVE",
          "pools": [
            {
              "name": "HTTP_pool",
              "provisioning_status": "ACTIVE",
              "healthmonitor": {
                "type": "HTTP",
                "id": "0b608787-ea2d-48c7-89a1-8b8c24fa3b17",
                "name": "HTTP_healthmonitor",
                "provisioning_status": "ACTIVE"
              },
              "members": [
                {
                  "name": "",
                  "provisioning_status": "ACTIVE",
                  "address": "192.0.2.20",
                  "protocol_port": 80,
                  "id": "3c6857f4-057a-405a-9134-bdeaa8796c",
                  "operating_status": "ERROR"
                },
                {
                  "name": "",
                  "provisioning_status": "ACTIVE",
                  "address": "192.0.2.21",
                  "protocol_port": 80,
                  "id": "f7495909-1706-4c91-83b4-641dab6962",
                  "operating_status": "ONLINE"
                }
              ],
              "id": "89a47f78-cf81-480b-ad74-bba4177eeb81",
              "operating_status": "DEGRADED"
            }
          ],
          "17policies": [],
          "id": "78febaf6-1e63-47c6-af5f-7b5e23fd7094",
          "operating_status": "DEGRADED"
        },
        {
          "name": "redirect_listener",
          "provisioning_status": "ACTIVE",
          "pools": [],
          "17policies": [

```

```

    {
      "action": "REDIRECT_TO_URL",
      "rules": [
        {
          "type": "PATH",
          "id": "27f3007a-a1cb-4e17-9696-0e578d6177",
          "provisioning_status": "ACTIVE"
        }
      ],
      "id": "2e8f3139-0673-43f9-aae4-c7a9460e3233",
      "name": "redirect_policy",
      "provisioning_status": "ACTIVE"
    }
  ],
  "id": "1341fbaf-ad4f-4cfe-a943-ad5e14e664cb",
  "operating_status": "ONLINE"
}
],
"pools": [
  {
    "name": "HTTP_pool",
    "provisioning_status": "ACTIVE",
    "healthmonitor": {
      "type": "HTTP",
      "id": "0b608787-ea2d-48c7-89a1-8b8c24fa3b17",
      "name": "HTTP_healthmonitor",
      "provisioning_status": "ACTIVE"
    },
    "members": [
      {
        "name": "",
        "provisioning_status": "ACTIVE",
        "address": "192.0.2.20",
        "protocol_port": 80,
        "id": "3c6857f4-057a-405a-9134-bdeaa8796c8a",
        "operating_status": "ERROR"
      },
      {
        "name": "",
        "provisioning_status": "ACTIVE",
        "address": "192.0.2.21",
        "protocol_port": 80,
        "id": "f7495909-1706-4c91-83b4-641dab6962ac",
        "operating_status": "ONLINE"
      }
    ],
    "id": "89a47f78-cf81-480b-ad74-bba4177eeb81",
    "operating_status": "DEGRADED"
  },
  {
    "name": "source_ip_pool",
    "provisioning_status": "ACTIVE",
    "healthmonitor": {},
    "members": [],
    "id": "8189d6a9-646e-4d23-b742-548dab991951",
    "operating_status": "ONLINE"
  }
],
"id": "84faceee-cb97-48d0-93df-9e41d40d4cb4",
"operating_status": "DEGRADED"
}
}
}

```

**PUT**

/v2/Ibaas/loadbalancers/ {loadbalancer\_id} /failover

### Failover a load balancer

[detail](#)

Performs a failover of a load balancer.

This operation is only available to users with load balancer administrative rights.

Success

Code	Reason
<b>202 - Accepted</b>	Request is accepted, but processing may take some time.
Error	
Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
loadbalancer_id	path	uuid	The ID of the load balancer to query.

## Curl Example

```
curl -X PUT -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/loc
```

## Response

There is no body content for the response of a successful failover request.

## Listeners

```
GET  
/v2/lbaas/listeners  
List Listeners
```

detail

Lists all listeners for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list listeners for other projects.

The list might be empty.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
project_id (Optional)	query	string	The ID of the project to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/list
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up or down ( <b>false</b> ).
allowed_cidrs	body	array	A list of IPv4, IPv6 or mix of both CIDRs <b>New in version 2.12</b>
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: h2, http/1.1, h2 <b>New in version 2.20</b>
client_authentication	body	string	The TLS client authentication mode. One of the <b>NONE</b> , <b>OPTIONAL</b> or <b>MANDATORY</b> . <b>New in version 2.8</b>
client_ca_tls_container_ref	body	string	The ref of the <a href="#">key_manager_service</a> secret containing PEM format client CA certificate bundle for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>
client_crl_container_ref	body	string	The URI of the <a href="#">key_manager_service</a> secret containing PEM format CA revocation list file for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>

Name	In	Type	Description
connection_limit	body	integer	The maximum number of connections permitted by the listener. Default value is -1 which represents infinite connections or a default value defined by the provider driver.
created_at	body	string	The UTC date and timestamp when the resource was created.
default_pool_id	body	uuid	The ID of the pool used by the listener if no L7 policy matches. The pool has some restrictions. See <a href="#">Protocol Combinations (Listener/Pool)</a> .
default_tls_container_ref	body	string	The URI of the <a href="#">key manager service</a> secret containing a PKCS12 format certificate/key bundle for <b>TERMINATED_HTTPS</b> listeners. DEPRECATED: A container of type "certificate" containing the certificate and key for <b>TERMINATED_HTTPS</b> listeners.
description	body	string	A human-readable description for the resource.
hsts_include_subdomains	body	bool	Defines whether the <b>includeSubDomains</b> directive should be added to the Strict-Transport-Security response header. <b>New in version 2.27</b>
hsts_max_age	body	integer	The value of the <b>max-age</b> directive for the Strict-Transport-Security HTTP response header. <b>New in version 2.27</b>
hsts_preload	body	bool	Defines whether the <b>preload</b> directive should be added to the Strict-Transport-Security HTTP response header. <b>New in version 2.27</b>
id	body	uuid	The ID of the listener.
insert_headers	body	object	A dictionary of optional headers to insert into the request before it is sent to the backend <b>member</b> . See <a href="#">Single Listener HTTP Header Insertions</a> . Both keys and values are specified as strings.
l7policies	body	array	A list of L7 policy IDs.
listener	body	object	A listener object.
loadbalancers	body	array	A list of load balancer IDs.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTP2</b> , <b>PROMETHEUS</b> , <b>TCP</b> , <b>TERMINATED_HTTPS</b> , or <b>UNSET</b> .
protocol_port	body	integer	The protocol port number for the resource.

Name	In	Type	Description
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Pro Status Codes</a> .
sni_container_refs	body	array	A list of URIs to the <a href="#">key manager service</a> secrets in PKCS12 format certificate/key bundles for <b>TERMINATED_HTTPS</b> listeners. (DEPRECATED) containers of type "certificate" containing the certificates and keys for <b>TERMINATED_HTTPS</b> listeners.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout_client_data	body	integer	Frontend client inactivity timeout in milliseconds. Default: 50000. <b>New in version 2.1</b>
timeout_member_connect	body	integer	Backend member connection timeout in milliseconds. Default: 5000. <b>New in version 2.1</b>
timeout_member_data	body	integer	Backend member inactivity timeout in milliseconds. Default: 50000. <b>New in version 2.1</b>
timeout_tcp_inspect	body	integer	Time, in milliseconds, to wait for additional TCP payload content inspection. Default: 0. <b>New in version 2.1</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated). <a href="https://www.openssl.org/docs/man1.1/man1/cipher.html">https://www.openssl.org/docs/man1.1/man1/cipher.html</a> <b>New in version 2.15</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was updated.

## Response Example

```
{
  "listeners": [
    {
      "description": "A great TLS listener",
      "admin_state_up": true,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "protocol": "TERMINATED_HTTPS",
      "protocol_port": 443,
      "provisioning_status": "ACTIVE",
      "default_tls_container_ref": "http://198.51.100.10:9311/v1/containers/default",
      "loadbalancers": [
        {
          "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
        }
      ],
      "insert_headers": {
        "X-Forwarded-Port": "true",
        "X-Forwarded-For": "true"
      },
      "created_at": "2017-02-28T00:42:44",
      "updated_at": "2017-02-28T00:44:30",
      "tags": []
    }
  ]
}
```

```

        "id": "023f2e34-7806-443b-bfae-16c324569a3d",
        "operating_status": "ONLINE",
        "default_pool_id": "ddb2b28f-89e9-45d3-a329-a359c3e39e4a",
        "sni_container_refs": [
            "http://198.51.100.10:9311/v1/containers/a570068c-d295-4780-8
            "http://198.51.100.10:9311/v1/containers/aaebb31e-7761-4826-8
        ],
        "l7policies": [
            {
                "id": "58284ac9-673e-47ff-9dcb-09871a1956c4",
                "id": "5e618272-339d-4a80-8d14-dbc093091bb1"
            }
        ],
        "name": "great_tls_listener",
        "timeout_client_data": 5000,
        "timeout_member_connect": 5000,
        "timeout_member_data": 5000,
        "timeout_tcp_inspect": 0,
        "tags": [
            "test_tag"
        ],
        "client_ca_tls_container_ref": "http://198.51.100.10:9311/v1/cont
        "client_authentication": "NONE",
        "client_crl_container_ref": "http://198.51.100.10:9311/v1/contair
        "allowed_cidrs": [
            "192.0.2.0/24",
            "198.51.100.0/24"
        ],
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-
        "tls_versions": [
            "TLSv1.2",
            "TLSv1.3"
        ],
        "alpn_protocols": [
            "http/1.1",
            "http/1.0"
        ],
        "hsts_include_subdomains": true,
        "hsts_max_age": 31536000,
        "hsts_preload": true
    }
]
}

```

POST

/v2/lbaas/listeners

**Create Listener**

detail

Creates a listener for a load balancer.

The listener configures a port and protocol for the load balancer to listen on for incoming requests. A load balancer may have zero or more listeners configured.

This operation provisions a new listener by using the configuration that you define in the request object. After the API validates the request and starts the provisioning process, the API returns a response object that contains a unique ID and the status of provisioning the listener.

In the response, the listener [provisioning\\_status](#) is **ACTIVE**, **PENDING\_CREATE**, or **ERROR**.

If the status is **PENDING\_CREATE**, issue GET [/v2/lbaas/listeners/{listener\\_id}](#) to view the progress of the provisioning operation. When the listener status changes to **ACTIVE**, the listener is successfully provisioned and is ready for further configuration.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about

the failure in the response body. Validation errors require that you correct the error and submit the request again.

Specifying a project\_id is deprecated. The listener will inherit the project\_id of the parent load balancer.

You can configure all documented features of the listener at creation time by specifying the additional elements or attributes in the request.

To create a listener, the parent load balancer must have an **ACTIVE** provisioning status.

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up or down ( <b>false</b> ). Default is <b>true</b> .
allowed_cidrs (Optional)	body	array	A list of IPv4, IPv6 or mix of both CIDRs. The default is allowed. When a list of CIDRs is provided, the switches to deny all. <b>New in version 2.12</b>
alpn_protocols (Optional)	body	array	A list of ALPN protocols. Available protocols: http/1.1, h2 <b>New in version 2.20</b>
client_authentication (Optional)	body	string	The TLS client authentication mode. One of the <b>NONE</b> , <b>OPTIONAL</b> or <b>MANDATORY</b> . <b>New in version 2.8</b>
client_ca_tls_container_ref (Optional)	body	string	The ref of the <a href="#">key manager service</a> secret containing the client CA certificate bundle for <b>TERMINATED HTTPS</b> listeners.

Name	In	Type	Description
<b>New in version 2.8</b>			
client_crl_container_ref (Optional)	body	string	The URI of the <a href="#">key manager service</a> secret containing PEM format CA revocation list file for <b>TERMINATED HTTPS</b> listeners.
<b>New in version 2.8</b>			
connection_limit (Optional)	body	integer	The maximum number of connections permitted by the listener. Default value is -1 which represents infinite connections or a default value defined by the protocol driver.
default_pool (Optional)	body	object	A pool object.
default_pool_id (Optional)	body	uuid	The ID of the pool used by the listener if no L7 match. The pool has some restrictions. See <a href="#">Protocol Combinations (Listener/Pool)</a> .
<b>New in version 2.8</b>			
default_tls_container_ref (Optional)	body	string	The URI of the <a href="#">key manager service</a> secret containing PKCS12 format certificate/key bundle for <b>TERMINATED HTTPS</b> listeners. DEPRECATED: This container of type "certificate" containing the certificate and key for <b>TERMINATED HTTPS</b> listeners.
description (Optional)	body	string	A human-readable description for the resource.
<b>New in version 2.27</b>			
hsts_include_subdomains (Optional)	body	bool	Defines whether the <b>includeSubDomains</b> directive should be added to the Strict-Transport-Security response header. This requires setting the <b>hsts_max_age</b> option as well in order to become effective.
<b>New in version 2.27</b>			
hsts_max_age (Optional)	body	integer	The value of the <b>max-age</b> directive for the Strict-Transport-Security HTTP response header. Setting this enables HTTP Strict Transport Security (HSTS) for terminated listeners.
<b>New in version 2.27</b>			
hsts_preload (Optional)	body	bool	Defines whether the <b>preload</b> directive should be added to the Strict-Transport-Security HTTP response header. This requires setting the <b>hsts_max_age</b> option as well in order to become effective.
<b>New in version 2.27</b>			
insert_headers (Optional)	body	object	A dictionary of optional headers to insert into the request before it is sent to the backend <b>member</b> . See <a href="#">Single Listener HTTP Header Insertions</a> . Both keys and values are specified as strings.
l7policies (Optional)	body	array	A list of L7 policy objects.
listeners	body	object	A listener object.
loadbalancer_id	body	uuid	The ID of the load balancer.
name (Optional)	body	string	Human-readable name of the resource.
project_id (Optional)	body	string	The ID of the project owning this resource. (deprecated)

Name	In	Type	Description
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTP2</b> , <b>PROMETHEUS</b> , <b>TCP</b> , <b>TERMINATED_HTTPS</b> , or <b>TERMINATED_TCP</b> .
protocol_port	body	integer	The protocol port number for the resource.
sni_container_refs (Optional)	body	array	A list of URIs to the <a href="#">key manager service</a> secrets endpoint for PKCS12 format certificate/key bundles for <b>TERMINATED_HTTPS</b> listeners. (DEPRECATED: containers of type "certificate" containing the certificate and keys for <b>TERMINATED_HTTPS</b> listeners.)
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout_client_data (Optional)	body	integer	Frontend client inactivity timeout in milliseconds. Default: 50000. <b>New in version 2.1</b>
timeout_member_connect (Optional)	body	integer	Backend member connection timeout in milliseconds. Default: 5000. <b>New in version 2.1</b>
timeout_member_data (Optional)	body	integer	Backend member inactivity timeout in milliseconds. Default: 50000. <b>New in version 2.1</b>
timeout_tcp_inspect (Optional)	body	integer	Time, in milliseconds, to wait for additional TCP payload content inspection. Default: 0. <b>New in version 2.1</b>
tls_ciphers (Optional)	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/cipher.html">https://www.openssl.org/docs/man1.1.1/man1/cipher.html</a> . <b>New in version 2.15</b>
tls_versions (Optional)	body	array	A list of TLS protocol versions. Available versions: TLSv1, TLSv1.1, TLSv1.2, TLSv1.3. <b>New in version 2.17</b>

## Supported HTTP Header Insertions

### Note

Both the key and the values are always specified as strings when specifying header insertions.

Key	Value	Description
X-Forwarded-For	string	When “ <b>true</b> ” a <b>X-Forwarded-For</b> header is inserted into the request to the backend <b>member</b> that specifies the client IP address.
X-Forwarded-Port	string	When “ <b>true</b> ” a <b>X-Forwarded-Port</b> header is inserted into the request to the backend <b>member</b> that specifies the listener port.
X-Forwarded-Proto	string	When “ <b>true</b> ” a <b>X-Forwarded-Proto</b> header is inserted into the request to the backend <b>member</b> . HTTP for the HTTP

Key	Value	Description
Proto		listener protocol type, HTTPS for the TERMINATED_HTTPS listener protocol type. <b>New in version 2.1</b>
X-SSL-Client-Verify	string	When "true" a <b>X-SSL-Client-Verify</b> header is inserted into the request to the backend <b>member</b> that contains 0 if the client authentication was successful, or an result error number greater than 0 that align to the openssl verify error codes.
X-SSL-Client-Has-Cert	string	When "true" a <b>X-SSL-Client-Has-Cert</b> header is inserted into the request to the backend <b>member</b> that is "true" if a client authentication certificate was presented, and "false" if not. Does not indicate validity.
X-SSL-Client-DN	string	When "true" a <b>X-SSL-Client-DN</b> header is inserted into the request to the backend <b>member</b> that contains the full Distinguished Name of the certificate presented by the client.
X-SSL-Client-CN	string	When "true" a <b>X-SSL-Client-CN</b> header is inserted into the request to the backend <b>member</b> that contains the Common Name from the full Distinguished Name of the certificate presented by the client.
X-SSL-Issuer	string	When "true" a <b>X-SSL-Issuer</b> header is inserted into the request to the backend <b>member</b> that contains the full Distinguished Name of the client certificate issuer.
X-SSL-Client-SHA1	string	When "true" a <b>X-SSL-Client-SHA1</b> header is inserted into the request to the backend <b>member</b> that contains the SHA-1 fingerprint of the certificate presented by the client in hex string format.
X-SSL-Client-Not-Before	string	When "true" a <b>X-SSL-Client-Not-Before</b> header is inserted into the request to the backend <b>member</b> that contains the start date presented by the client as a formatted string YYMMDDhhmmss[Z].
X-SSL-Client-Not-After	string	When "true" a <b>X-SSL-Client-Not-After</b> header is inserted into the request to the backend <b>member</b> that contains the end date presented by the client as a formatted string YYMMDDhhmmss[Z].

## Request Example

```
{
  "listener": {
    "protocol": "TERMINATED_HTTPS",
    "description": "A great TLS listener",
    "admin_state_up": true,
    "connection_limit": 200,
    "protocol_port": "443",
    "loadbalancer_id": "607226db-27ef-4d41-ae89-f2a800e9c2db",
    "name": "great_tls_listener",
    "insert_headers": {
      "X-Forwarded-For": "true",
      "X-Forwarded-Port": "true"
    },
    "default_tls_container_ref": "http://198.51.100.10:9311/v1/containers",
    "sni_container_refs": [
      "http://198.51.100.10:9311/v1/containers/a570068c-d295-4780-91d4-",
      "http://198.51.100.10:9311/v1/containers/aaebb31e-7761-4826-8cb4-"
    ]
  }
}
```

```

        ],
        "timeout_client_data": 50000,
        "timeout_member_connect": 5000,
        "timeout_member_data": 50000,
        "timeout_tcp_inspect": 0,
        "tags": ["test_tag"],
        "client_ca_tls_container_ref": "http://198.51.100.10:9311/v1/containe
        "client_authentication": "MANDATORY",
        "client_crl_container_ref": "http://198.51.100.10:9311/v1/containers/
        "allowed_cidrs": [
            "192.0.2.0/24",
            "198.51.100.0/24"
        ],
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA2
        "tls_versions": ["TLSv1.2", "TLSv1.3"],
        "alpn_protocols": ["http/1.1", "http/1.0"],
        "hsts_include_subdomains": true,
        "hsts_max_age": 31536000,
        "hsts_preload": true
    }
}

```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up or down ( <b>false</b> ).
allowed_cidrs	body	array	A list of IPv4, IPv6 or mix of both CIDRs <b>New in version 2.12</b>
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: http/1.1, h2 <b>New in version 2.20</b>
client_authentication	body	string	The TLS client authentication mode. One of the <b>NONE</b> , <b>OPTIONAL</b> or <b>MANDATORY</b> . <b>New in version 2.8</b>
client_ca_tls_container_ref	body	string	The ref of the <a href="#">key manager service</a> secret containing PEM format client CA certificate bundle for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>
client_crl_container_ref	body	string	The URI of the <a href="#">key manager service</a> secret containing PEM format CA revocation list file for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>
connection_limit	body	integer	The maximum number of connections permitted by the listener. Default value is -1 which represents infinite connections or a default value defined by the provider.
created_at	body	string	The UTC date and timestamp when the resource was created.

Name	In	Type	Description
default_pool_id	body	uuid	The ID of the pool used by the listener if no L7 match. The pool has some restrictions. See <a href="#">Protocol Combinations (Listener/Pool)</a> .
default_tls_container_ref	body	string	The URI of the <a href="#">key manager service</a> secret containing PKCS12 format certificate/key bundle for <b>TERMINATED_HTTPS</b> listeners. DEPRECATED: container of type "certificate" containing the certificate and keys for <b>TERMINATED_HTTPS</b> listeners.
description	body	string	A human-readable description for the resource.
hsts_include_subdomains	body	bool	Defines whether the <b>includeSubDomains</b> directive should be added to the Strict-Transport-Security response header. <b>New in version 2.27</b>
hsts_max_age	body	integer	The value of the <b>max_age</b> directive for the Strict-Transport-Security HTTP response header. <b>New in version 2.27</b>
hsts_preload	body	bool	Defines whether the <b>preload</b> directive should be added to the Strict-Transport-Security HTTP response header. <b>New in version 2.27</b>
id	body	uuid	The ID of the listener.
insert_headers	body	object	A dictionary of optional headers to insert into the request before it is sent to the backend <b>member</b> . See <a href="#">Single Listener HTTP Header Insertions</a> . Both keys and values are specified as strings.
l7policies	body	array	A list of L7 policy IDs.
listener	body	object	A listener object.
loadbalancers	body	array	A list of load balancer IDs.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTP2</b> , <b>PROMETHEUS</b> , <b>TCP</b> , <b>TERMINATED_HTTPS</b> , or <b>TERMINATED_HTTP2</b> .
protocol_port	body	integer	The protocol port number for the resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
sni_container_refs	body	array	A list of URLs to the <a href="#">key manager service</a> secrets containing PKCS12 format certificate/key bundles for <b>TERMINATED_HTTPS</b> listeners. (DEPRECATED) container of type "certificate" containing the certificate and keys for <b>TERMINATED_HTTPS</b> listeners.

Name	In	Type	Description
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout_client_data	body	integer	Frontend client inactivity timeout in milliseconds Default: 50000. <b>New in version 2.1</b>
timeout_member_connect	body	integer	Backend member connection timeout in millis Default: 5000. <b>New in version 2.1</b>
timeout_member_data	body	integer	Backend member inactivity timeout in milliseconds Default: 50000. <b>New in version 2.1</b>
timeout_tcp_inspect	body	integer	Time, in milliseconds, to wait for additional TCP payload content inspection. Default: 0. <b>New in version 2.1</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated) <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was updated.

## Response Example

```
{
  "listener": {
    "description": "A great TLS listener",
    "admin_state_up": true,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "protocol": "TERMINATED_HTTPS",
    "protocol_port": 443,
    "provisioning_status": "PENDING_CREATE",
    "default_tls_container_ref": "http://198.51.100.10:9311/v1/containers/default",
    "loadbalancers": [
      {
        "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
      }
    ],
    "insert_headers": {
      "X-Forwarded-Port": "true",
      "X-Forwarded-For": "true"
    },
    "created_at": "2017-02-28T00:42:44",
    "updated_at": "2017-02-28T00:44:30",
    "id": "023f2e34-7806-443b-bfae-16c324569a3d",
    "operating_status": "OFFLINE",
    "default_pool_id": "ddb2b28f-89e9-45d3-a329-a359c3e39e4a",
    "sni_container_refs": [
      "http://198.51.100.10:9311/v1/containers/a570068c-d295-4780-91d4-4826-8cb4-17",
      "http://198.51.100.10:9311/v1/containers/aaebb31e-7761-4826-8cb4-17"
    ],
    "17policies": [
      {
        "id": "5e618272-339d-4a80-8d14-dbc093091bb1"
      }
    ],
    "name": "great_tls_listener",
    "status": "PENDING_CREATE"
  }
}
```

```

        "timeout_client_data": 50000,
        "timeout_member_connect": 5000,
        "timeout_member_data": 50000,
        "timeout_tcp_inspect": 0,
        "tags": ["test_tag"],
        "client_ca_tls_container_ref": "http://198.51.100.10:9311/v1/containers/test",
        "client_authentication": "MANDATORY",
        "client_crl_container_ref": "http://198.51.100.10:9311/v1/containers/test",
        "allowed_cidrs": [
            "192.0.2.0/24",
            "198.51.100.0/24"
        ],
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
        "tls_versions": [
            "TLSv1.2",
            "TLSv1.3"
        ],
        "alpn_protocols": [
            "http/1.1",
            "http/1.0"
        ],
        "hsts_include_subdomains": true,
        "hsts_max_age": 31536000,
        "hsts_preload": true
    }
}

```

GET  
/v2/lbaas/listeners/ **{listener\_id}**  
**Show Listener details**

detail

Shows the details of a listener.

If you are not an administrative user and the parent load balancer does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By

Name	In	Type	Description
			using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
listener_id	path	uuid	The ID of the listener to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/listeners/1
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up or down ( <b>false</b> ).
allowed_cidrs	body	array	A list of IPv4, IPv6 or mix of both CIDRs <b>New in version 2.12</b>
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: http/1.1, h2 <b>New in version 2.20</b>
client_authentication	body	string	The TLS client authentication mode. One of the <b>NONE</b> , <b>OPTIONAL</b> or <b>MANDATORY</b> . <b>New in version 2.8</b>
client_ca_tls_container_ref	body	string	The ref of the <a href="#">key manager service</a> secret containing client CA certificate bundle for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>
client_crl_container_ref	body	string	The URI of the <a href="#">key manager service</a> secret containing PEM format CA revocation list file for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>
connection_limit	body	integer	The maximum number of connections permitted by the listener. Default value is -1 which represents infinite connections or a default value defined by the proxy driver.
created_at	body	string	The UTC date and timestamp when the resource was created.
default_pool_id	body	uuid	The ID of the pool used by the listener if no L7 match. The pool has some restrictions. See <a href="#">Proxy Combinations (Listener/Pool)</a> .
default_tls_container_ref	body	string	The URI of the <a href="#">key manager service</a> secret containing PKCS12 format certificate/key bundle for <b>TERMINATED_HTTPS</b> listeners. DEPRECATED: ,

Name	In	Type	Description
			container of type "certificate" containing the cert key for <b>TERMINATED_HTTPS</b> listeners.
description	body	string	A human-readable description for the resource.
hsts_include_subdomains	body	bool	Defines whether the <b>includeSubDomains</b> directive should be added to the Strict-Transport-Security response header.  <b>New in version 2.27</b>
hsts_max_age	body	integer	The value of the <b>max_age</b> directive for the Strict-Transport-Security HTTP response header.  <b>New in version 2.27</b>
hsts_preload	body	bool	Defines whether the <b>preload</b> directive should be added to the Strict-Transport-Security HTTP response header.  <b>New in version 2.27</b>
id	body	uuid	The ID of the listener.
insert_headers	body	object	A dictionary of optional headers to insert into the request before it is sent to the backend <b>member</b> . See <a href="#">Section: HTTP Header Insertions</a> . Both keys and values are specified as strings.
l7policies	body	array	A list of L7 policy IDs.
listener	body	object	A listener object.
loadbalancers	body	array	A list of load balancer IDs.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTP2</b> , <b>PROMETHEUS</b> , <b>TCP</b> , <b>TERMINATED_HTTPS</b> , or <b>UNSET</b> .
protocol_port	body	integer	The protocol port number for the resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
sni_container_refs	body	array	A list of URIs to the <a href="#">key manager service</a> secrets containing PKCS12 format certificate/key bundles for <b>TERMINATED_HTTPS</b> listeners. (DEPRECATED) containers of type "certificate" containing the certificate and keys for <b>TERMINATED_HTTPS</b> listeners.
tags	body	array	A list of simple strings assigned to the resource.  <b>New in version 2.5</b>
timeout_client_data	body	integer	Frontend client inactivity timeout in milliseconds. Default value is 50000.  <b>New in version 2.1</b>

Name	In	Type	Description
timeout_member_connect	body	integer	Backend member connection timeout in millis Default: 5000. <b>New in version 2.1</b>
timeout_member_data	body	integer	Backend member inactivity timeout in millis Default: 50000. <b>New in version 2.1</b>
timeout_tcp_inspect	body	integer	Time, in milliseconds, to wait for additional TCP payload content inspection. Default: 0. <b>New in version 2.1</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated) <a href="https://www.openssl.org/docs/man1.1.1/man1/cipher.html">https://www.openssl.org/docs/man1.1.1/man1/cipher.html</a> <b>New in version 2.15</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was updated.

## Response Example

```
{
  "listener": {
    "description": "A great TLS listener",
    "admin_state_up": true,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "protocol": "TERMINATED_HTTPS",
    "protocol_port": 443,
    "provisioning_status": "ACTIVE",
    "default_tls_container_ref": "http://198.51.100.10:9311/v1/containers/default",
    "loadbalancers": [
      {
        "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
      }
    ],
    "insert_headers": {
      "X-Forwarded-Port": "true",
      "X-Forwarded-For": "true"
    },
    "created_at": "2017-02-28T00:42:44",
    "updated_at": "2017-02-28T00:44:30",
    "id": "023f2e34-7806-443b-bfae-16c324569a3d",
    "operating_status": "ONLINE",
    "default_pool_id": "ddb2b28f-89e9-45d3-a329-a359c3e39e4a",
    "sni_container_refs": [
      "http://198.51.100.10:9311/v1/containers/a570068c-d295-4780-91d4-83a59c3e39e4a",
      "http://198.51.100.10:9311/v1/containers/aaebb31e-7761-4826-8cb4-83a59c3e39e4a"
    ],
    "17policies": [
      {
        "id": "5e618272-339d-4a80-8d14-dbc093091bb1"
      }
    ],
    "name": "great_tls_listener",
    "timeout_client_data": 5000,
    "timeout_member_connect": 5000,
    "timeout_member_data": 50000,
    "timeout_tcp_inspect": 0,
    "tags": ["test_tag"],
    "client_ca_tls_container_ref": "http://198.51.100.10:9311/v1/containers/default",
    "client_authentication": "MANDATORY",
    "client_crl_container_ref": "http://198.51.100.10:9311/v1/containers/default",
    "allowed_cidrs": [
      "192.0.2.0/24",
      "192.0.2.1/24"
    ]
  }
}
```

```

        "198.51.100.0/24"
    ],
    "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
    "tls_versions": [
        "TLSv1.2",
        "TLSv1.3"
    ],
    "alpn_protocols": [
        "http/1.1",
        "http/1.0"
    ],
    "hsts_include_subdomains": true,
    "hsts_max_age": 31536000,
    "hsts_preload": true
}
}

```

**PUT**  
/v2/lbaas/listeners/ **{listener\_id}**  
**Update a Listener**

detail

Update an existing listener.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the update, check that the listener provisioning status is **ACTIVE**. If the status is **PENDING\_UPDATE**, use a GET operation to poll the listener object for changes.

This operation returns the updated listener object with the **ACTIVE**, **PENDING\_UPDATE**, or **ERROR** provisioning status.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up or down ( <b>false</b> ). Default is <b>true</b> .

Name	In	Type	Description
allowed_cidrs (Optional)	body	array	A list of IPv4, IPv6 or mix of both CIDRs. The default is allowed. When a list of CIDRs is provided, the switches to deny all.  <b>New in version 2.12</b>
alpn_protocols (Optional)	body	array	A list of ALPN protocols. Available protocols: http/1.1, h2  <b>New in version 2.20</b>
client_authentication (Optional)	body	string	The TLS client authentication mode. One of the <b>NONE</b> , <b>OPTIONAL</b> or <b>MANDATORY</b> .  <b>New in version 2.8</b>
client_ca_tls_container_ref (Optional)	body	string	The ref of the <a href="#">key manager service</a> secret containing PEM format client CA certificate bundle for <b>TERMINATED_HTTPS</b> listeners.  <b>New in version 2.8</b>
client_crl_container_ref (Optional)	body	string	The URI of the <a href="#">key manager service</a> secret containing PEM format CA revocation list file for <b>TERMINATED_HTTPS</b> listeners.  <b>New in version 2.8</b>
connection_limit (Optional)	body	integer	The maximum number of connections permitted by the listener. Default value is -1 which represents infinite connections or a default value defined by the protocol driver.
default_pool_id (Optional)	body	uuid	The ID of the pool used by the listener if no L7 match. The pool has some restrictions. See <a href="#">Protocol Combinations (Listener/Pool)</a> .
default_tls_container_ref (Optional)	body	string	The URI of the <a href="#">key manager service</a> secret containing PKCS12 format certificate/key bundle for <b>TERMINATED_HTTPS</b> listeners. DEPRECATED: This container of type "certificate" containing the certificate and key for <b>TERMINATED_HTTPS</b> listeners.
description (Optional)	body	string	A human-readable description for the resource.
hsts_include_subdomains (Optional)	body	bool	Defines whether the <b>includeSubDomains</b> directive should be added to the Strict-Transport-Security response header. This requires setting the <b>hsts_max_age</b> option as well in order to become effective.  <b>New in version 2.27</b>
hsts_max_age (Optional)	body	integer	The value of the <b>max_age</b> directive for the Strict-Transport-Security HTTP response header. Sets the value that enables HTTP Strict Transport Security (HSTS) for terminated listener.  <b>New in version 2.27</b>
hsts_preload (Optional)	body	bool	Defines whether the <b>preload</b> directive should be added to the Strict-Transport-Security HTTP response header. This requires setting the <b>hsts_max_age</b> option as well in order to become effective.

Name	In	Type	Description
<b>New in version 2.27</b>			
insert_headers (Optional)	body	object	A dictionary of optional headers to insert into the request before it is sent to the backend <code>member</code> . See <a href="#">SNI Header Insertions</a> . Both keys and values are specified as strings.
listener_id	path	uuid	The ID of the listener to query.
name (Optional)	body	string	Human-readable name of the resource
sni_container_refs (Optional)	body	array	A list of URIs to the <code>key_manager_service</code> secrets containing PKCS12 format certificate/key bundles for <code>TERMINATED_HTTPS</code> listeners. (DEPRECATED: containers of type "certificate" containing the certificates and keys for <code>TERMINATED_HTTPS</code> listeners.)
tags (Optional)	body	array	A list of simple strings assigned to the resource.
<b>New in version 2.5</b>			
timeout_client_data (Optional)	body	integer	Frontend client inactivity timeout in milliseconds. Default: 50000.
<b>New in version 2.1</b>			
timeout_member_connect (Optional)	body	integer	Backend member connection timeout in milliseconds. Default: 5000.
<b>New in version 2.1</b>			
timeout_member_data (Optional)	body	integer	Backend member inactivity timeout in milliseconds. Default: 50000.
<b>New in version 2.1</b>			
timeout_tcp_inspect (Optional)	body	integer	Time, in milliseconds, to wait for additional TCP payload content inspection. Default: 0.
<b>New in version 2.1</b>			
tls_ciphers (Optional)	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/cipher.html">https://www.openssl.org/docs/man1.1.1/man1/cipher.html</a>
<b>New in version 2.15</b>			
tls_versions (Optional)	body	array	A list of TLS protocol versions. Available versions: TLSv1, TLSv1.1, TLSv1.2, TLSv1.3
<b>New in version 2.17</b>			

## Request Example

```
{
  "listener": {
    "description": "An updated great TLS listener",
    "admin_state_up": true,
    "connection_limit": 200,
    "name": "great_updated_tls_listener",
    "default_pool_id": "ddb2b28f-89e9-45d3-a329-a359c3e39e4a",
    "insert_headers": {
      "X-Forwarded-For": "false",
      "X-Forwarded-Port": "true"
    },
    "default_tls_container_ref": "http://198.51.100.10:9311/v1/containers/a570068c-d295-4780-91d4-aaebb31e-7761-4826-8cb4-",
    "sni_container_refs": [
      "http://198.51.100.10:9311/v1/containers/a570068c-d295-4780-91d4-aaebb31e-7761-4826-8cb4-",
      "http://198.51.100.10:9311/v1/containers/aaebb31e-7761-4826-8cb4-"
    ]
  }
}
```

```

        ],
        "timeout_client_data": 100000,
        "timeout_member_connect": 1000,
        "timeout_member_data": 100000,
        "timeout_tcp_inspect": 5,
        "tags": [
            "updated_tag"
        ],
        "client_ca_tls_container_ref": null,
        "allowed_cidrs": [
            "192.0.2.0/24",
            "198.51.100.0/24"
        ],
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
        "tls_versions": [
            "TLSv1.2",
            "TLSv1.3"
        ],
        "alpn_protocols": [
            "http/1.1",
            "http/1.0"
        ],
        "hsts_include_subdomains": true,
        "hsts_max_age": 31536000,
        "hsts_preload": true
    }
}

```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```



## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up or down ( <b>false</b> ).
allowed_cidrs	body	array	A list of IPv4, IPv6 or mix of both CIDRs <b>New in version 2.12</b>
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: http/1.1, h2 <b>New in version 2.20</b>
client_authentication	body	string	The TLS client authentication mode. One of the <b>NONE</b> , <b>OPTIONAL</b> or <b>MANDATORY</b> . <b>New in version 2.8</b>
client_ca_tls_container_ref	body	string	The ref of the <a href="#">key manager service</a> secret containing client CA certificate bundle for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>
client_crl_container_ref	body	string	The URI of the <a href="#">key manager service</a> secret containing PEM format CA revocation list file for <b>TERMINATED_HTTPS</b> listeners. <b>New in version 2.8</b>
connection_limit	body	integer	The maximum number of connections permitted by the listener. Default value is -1 which represents infinity.

Name	In	Type	Description
			connections or a default value defined by the provider.
created_at	body	string	The UTC date and timestamp when the resource was created.
default_pool_id	body	uuid	The ID of the pool used by the listener if no L7 match. The pool has some restrictions. See <a href="#">Protocol Combinations (Listener/Pool)</a> .
default_tls_container_ref	body	string	The URI of the <a href="#">key manager service</a> secret containing a PKCS12 format certificate/key bundle for <b>TERMINATED_HTTPS</b> listeners. DEPRECATED: A container of type "certificate" containing the certificate key for <b>TERMINATED_HTTPS</b> listeners.
description	body	string	A human-readable description for the resource.
hsts_include_subdomains	body	bool	Defines whether the <b>includeSubDomains</b> directive should be added to the Strict-Transport-Security response header.  <b>New in version 2.27</b>
hsts_max_age	body	integer	The value of the <b>max_age</b> directive for the Strict-Transport-Security HTTP response header.  <b>New in version 2.27</b>
hsts_preload	body	bool	Defines whether the <b>preload</b> directive should be added to the Strict-Transport-Security HTTP response header.  <b>New in version 2.27</b>
id	body	uuid	The ID of the listener.
insert_headers	body	object	A dictionary of optional headers to insert into the request before it is sent to the backend member. See <a href="#">Single Listener HTTP Header Insertions</a> . Both keys and values are specified as strings.
l7policies	body	array	A list of L7 policy IDs.
listener	body	object	A listener object.
loadbalancers	body	array	A list of load balancer IDs.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTP2</b> , <b>PROMETHEUS</b> , <b>TCP</b> , <b>TERMINATED_HTTPS</b> , or <b>TERMINATED_HTTP2</b> .
protocol_port	body	integer	The protocol port number for the resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .

Name	In	Type	Description
sni_container_refs	body	array	A list of URLs to the <a href="#">key manager service</a> secrets endpoint for PKCS12 format certificate/key bundles for <b>TERMINATED_HTTPS</b> listeners. (DEPRECATED) containers of type "certificate" containing the certificates and keys for <b>TERMINATED_HTTPS</b> listeners.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout_client_data	body	integer	Frontend client inactivity timeout in milliseconds. Default: 50000. <b>New in version 2.1</b>
timeout_member_connect	body	integer	Backend member connection timeout in milliseconds. Default: 5000. <b>New in version 2.1</b>
timeout_member_data	body	integer	Backend member inactivity timeout in milliseconds. Default: 50000. <b>New in version 2.1</b>
timeout_tcp_inspect	body	integer	Time, in milliseconds, to wait for additional TCP payload content inspection. Default: 0. <b>New in version 2.1</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated). <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was updated.

## Response Example

```
{
  "listener": {
    "description": "An updated great TLS listener",
    "admin_state_up": true,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "protocol": "TERMINATED_HTTPS",
    "protocol_port": 443,
    "provisioning_status": "PENDING_UPDATE",
    "default_tls_container_ref": "http://198.51.100.10:9311/v1/containers/023f2e34-7806-443b-bfae-16c324569a3d",
    "loadbalancers": [
      {
        "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
      }
    ],
    "insert_headers": {
      "X-Forwarded-Port": "true",
      "X-Forwarded-For": "false"
    },
    "created_at": "2017-02-28T00:42:44",
    "updated_at": "2017-02-28T00:44:30",
    "id": "023f2e34-7806-443b-bfae-16c324569a3d",
    "operating_status": "OFFLINE",
    "default_pool_id": "ddb2b28f-89e9-45d3-a329-a359c3e39e4a",
    "sni_container_refs": [
      "http://198.51.100.10:9311/v1/containers/a570068c-d295-4780-91d4-"
    ]
  }
}
```

```

        "http://198.51.100.10:9311/v1/containers/aaebb31e-7761-4826-8cb4-
    ],
    "17policies": [
        {
            "id": "5e618272-339d-4a80-8d14-dbc093091bb1"
        }
    ],
    "name": "great_updated_tls_listener",
    "timeout_client_data": 100000,
    "timeout_member_connect": 1000,
    "timeout_member_data": 100000,
    "timeout_tcp_inspect": 5,
    "tags": ["updated_tag"],
    "client_ca_tls_container_ref": null,
    "client_authentication": "NONE",
    "client_crl_container_ref": null,
    "allowed_cidrs": [
        "192.0.2.0/24",
        "198.51.100.0/24"
    ],
    "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
    "tls_versions": [
        "TLSv1.2",
        "TLSv1.3"
    ],
    "alpn_protocols": [
        "http/1.1",
        "http/1.0"
    ],
    "hsts_include_subdomains": true,
    "hsts_max_age": 31536000,
    "hsts_preload": true
}
}

```

#### DELETE

/v2/lbaas/listeners/ {*listener\_id*}

#### Remove a Listener

[detail](#)

Removes a listener and its associated configuration from the project.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

#### Success

##### Code

##### Reason

<b>204 - No Content</b>	Request fulfilled but service does not return anything.
-------------------------	---

#### Error

##### Code

##### Reason

<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.

Code	Reason
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
listener_id	path	uuid	The ID of the listener to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

GET  
 /v2/lbaas/listeners/ {**listener\_id**} /stats  
**Get Listener statistics**

detail

Shows the current statistics for a listener.

This operation returns the statistics of a listener object identified by `listener_id`.

If you are not an administrative user and the parent load balancer does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
listener_id	path	uuid	The ID of the listener to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/list
```

## Response Parameters

Name	In	Type	Description
stats	body	object	A statistics object.
active_connections	body	integer	The currently active connections.
bytes_in	body	integer	The total bytes received.
bytes_out	body	integer	The total bytes sent.
request_errors	body	integer	The total requests that were unable to be fulfilled.
total_connections	body	integer	The total connections handled.

## Response Example

```
{  
    "stats": {  
        "bytes_in": 65671420,  
        "total_connections": 26189172,  
        "active_connections": 48629,  
        "bytes_out": 774771186,  
        "request_errors": 0  
    }  
}
```

## Pools

GET  
/v2/lbaas/pools  
**List Pools**

detail

Lists all pools for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list pools for other projects.

The list might be empty.

## Success

Code	Reason
200 - OK	Request was successful.

## Error

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

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
project_id (Optional)	query	string	The ID of the project to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/poc
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: http/1.0, http/1.1, h2 <b>New in version 2.24</b>
ca_tls_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA certificate bundle for <b>tls_enabled</b> pools. <b>New in version 2.8</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
crl_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA revocation list file for <b>tls_enabled</b> pools.
description	body	string	A human-readable description for the resource.
healthmonitor_id	body	uuid	The associated health monitor ID.
id	body	uuid	The ID of the pool.
lb_algorithm	body	string	The load balancing algorithm for the pool. One of <b>LEAST_CONNECTIONS</b> , <b>ROUND_ROBIN</b> , <b>SOURCE_IP</b> ,

Name	In	Type	Description
			<b>SOURCE_IP_PORT</b> .
listeners	body	array	A list of listener IDs.
loadbalancers	body	array	A list of load balancer IDs.
members	body	array	A list of member IDs.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PROXY</b> , <b>PROXYV2</b> , <b>SCTP</b> , <b>TCP</b> , or <b>UDP</b> .
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
session_persistence	body	object	A JSON object specifying the session persistence for the pool or <b>null</b> for no session persistence. See <a href="#">Pool Session Persistence</a> . Default is <b>null</b> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_container_ref	body	string	The reference to the <a href="#">key manager service</a> secret containing a PKCS12 format certificate/key bundle for <b>tls_enabled</b> pools for TLS client authentication to the member servers.
tls_enabled	body	boolean	When <b>true</b> connections to backend member servers will use TLS encryption. Default is <b>false</b> . <b>New in version 2.8</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: SSLv3, TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

## Response Example

```
{
  "pools": [
    {
      "lb_algorithm": "ROUND_ROBIN",
      "protocol": "HTTP",
      "description": "My round robin pool",
      "admin_state_up": true,
      "loadbalancers": [
        {
          "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
        }
      ]
    }
  ]
}
```

```

        ],
        "created_at": "2017-04-13T18:14:44",
        "provisioning_status": "ACTIVE",
        "updated_at": "2017-04-13T23:08:12",
        "session_persistence": {
            "cookie_name": null,
            "type": "SOURCE_IP"
        },
        "listeners": [
            {
                "id": "023f2e34-7806-443b-bfae-16c324569a3d"
            }
        ],
        "members": [
            {
                "id": "5bc73753-348f-4b5a-8f9c-10bd7b30dc35",
                "id": "692e8358-f8fd-4b92-bbca-6e4b97c75571"
            }
        ],
        "healthmonitor_id": null,
        "project_id": "e3cd678b11784734bc366148aa37580e",
        "id": "ddb2b28f-89e9-45d3-a329-a359c3e39e4a",
        "operating_status": "ONLINE",
        "name": "round_robin_pool",
        "tags": ["test_tag"],
        "tls_container_ref": "http://198.51.100.10:9311/v1/containers/407",
        "ca_tls_container_ref": "http://198.51.100.10:9311/v1/containers/",
        "crl_container_ref": "http://198.51.100.10:9311/v1/containers/6fa",
        "tls_enabled": true,
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-",
        "tls_versions": ["TLSv1.2", "TLSv1.3"],
        "alpn_protocols": ["http/1.1", "http/1.0"]
    }
]
}

```

POST  
/v2/lbaas/pools  
**Create Pool**

[detail](#)

Creates a pool for a load balancer.

The pool defines how requests should be balanced across the backend member servers.

This operation provisions a pool by using the configuration that you define in the request object. After the API validates the request and starts the provisioning process, the API returns a response object, which contains a unique ID.

In the response, the pool [provisioning\\_status](#) is **ACTIVE**, **PENDING\_CREATE**, or **ERROR**.

If the status is **PENDING\_CREATE**, issue GET [/v2/lbaas/pools/{pool\\_id}](#) to view the progress of the provisioning operation. When the pool status changes to **ACTIVE**, the pool is successfully provisioned and is ready for further configuration.

At a minimum, you must specify these pool attributes:

- **protocol** The protocol for which this pool and its members listen. A valid value is **HTTP**, **HTTPS**, **PROXY**, **PROXYV2**, **SCTP**, **TCP**, or **UDP**.
- **lb\_algorithm** The load-balancer algorithm, such as **ROUND\_ROBIN**, **LEAST\_CONNECTIONS**, **SOURCE\_IP** and **SOURCE\_IP\_PORT**, that distributes traffic to the pool members. The load-balancer provider must support this algorithm.
- **listener\_id** The ID of the listener in which this pool becomes the default pool. Each listener has only one default pool.

—OR—

- **loadbalancer\_id** The ID of the load balancer under which this pool will be created. Each load balancer can have zero or more pools associated with it. These pools can be used for L7policies.

 **Note**

Either `listener_id` or `loadbalancer_id` must be specified.

Some attributes receive default values if you omit them from the request:

- **admin\_state\_up** Default is `true`.
- **name** Default is an empty string.
- **description** Default is an empty string.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

Specifying a project\_id is deprecated. The pool will inherit the project\_id of the parent load balancer.

You can configure all documented features of the pool at creation time by specifying the additional elements or attributes in the request.

To create a pool, the parent load balancer must have an **ACTIVE** provisioning status.

`SOURCE_IP_PORT` algorithm is available from version 2.13.

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
alpn_protocols (Optional)	body	array	A list of ALPN protocols. Available protocols: http/1.0, http/1.1, h2 <b>New in version 2.24</b>
ca_tls_container_ref (Optional)	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA certificate bundle for <b>tls_enabled</b> pools. <b>New in version 2.8</b>
crl_container_ref (Optional)	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA revocation list file for <b>tls_enabled</b> pools.
description (Optional)	body	string	A human-readable description for the resource.
lb_algorithm	body	string	The load balancing algorithm for the pool. One of <b>LEAST_CONNECTIONS</b> , <b>ROUND_ROBIN</b> , <b>SOURCE_IP</b> , <b>SOURCE_IP_PORT</b> .
listener_id (Optional)	body	uuid	The ID of the listener for the pool. Either <b>listener_id</b> or <b>loadbalancer_id</b> must be specified. The listener has some restrictions, See <a href="#">Protocol Combinations (Listener/Pool)</a> .
loadbalancer_id (Optional)	body	uuid	The ID of the load balancer for the pool. Either <b>listener_id</b> or <b>loadbalancer_id</b> must be specified.
name (Optional)	body	string	Human-readable name of the resource.
project_id (Optional)	body	string	The ID of the project owning this resource. (deprecate)
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PROXY</b> , <b>PROXYV2</b> , <b>SCTP</b> , <b>TCP</b> , or <b>UDP</b> .
session_persistence (Optional)	body	object	A JSON object specifying the session persistence for the pool or <b>null</b> for no session persistence. See <a href="#">Pool Session Persistence</a> . Default is <b>null</b> .
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
tls_enabled (Optional)	body	boolean	When <b>true</b> connections to backend member servers will use TLS encryption. Default is <b>false</b> . <b>New in version 2.8</b>
tls_ciphers (Optional)	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_container_ref (Optional)	body	string	The reference to the <a href="#">key manager service</a> secret containing a PKCS12 format certificate/key bundle for <b>tls_enabled</b> pools for TLS client authentication to the member server.

Name	In	Type	Description
<b>New in version 2.8</b>			
tls_versions (Optional)	body	array	A list of TLS protocol versions. Available versions: SSLv3, TLSv1, TLSv1.1, TLSv1.2, TLSv1.3.  <b>New in version 2.17</b>
<b>New in version 2.8</b>			

## Pool Session Persistence

Pool session persistence tells the load balancer to attempt to send future requests from a client to the same backend member as the initial request.

When the pool has no session persistence, the session persistence object is `null`.

Octavia currently support three session persistence methods:

Method	Description
<b>APP_COOKIE</b>	Use the specified <code>cookie_name</code> send future requests to the same member.
<b>HTTP_COOKIE</b>	The load balancer will generate a cookie that is inserted into the response. This cookie will be used to send future requests to the same member.
<b>SOURCE_IP</b>	The source IP address on the request will be hashed to send future requests to the same member.

## Pool Session Persistence Object

Name	In	Type	Description
type	body	string	Session persistence type for the pool. One of <b>APP_COOKIE</b> , <b>HTTP_COOKIE</b> , or <b>SOURCE_IP</b> .
cookie_name (Optional)	body	string	The name of the cookie to use for session persistence. Only applicable to the <b>APP_COOKIE</b> session persistence type where it is required.
persistence_timeout (Optional)	body	integer	The timeout, in seconds, after which a SCTP or UDP flow may be rescheduled to a different member. Currently only applies to SCTP or UDP pools with session persistence of <b>SOURCE_IP</b> . Default is 360.  <b>New in version 2.2</b>
persistence_granularity (Optional)	body	string	The netmask used to determine SCTP or UDP session persistence. Currently only valid for SCTP or UDP pools with session persistence of <b>SOURCE_IP</b> . Default netmask is 255.255.255.255, meaning per client full IP.  <b>New in version 2.2</b>

## Pool Session Persistence Object Example

```
{"cookie_name": "my_app_cookie", "type": "APP_COOKIE"}
```

## Request Example

```
{
  "pool": {
    "lb_algorithm": "ROUND_ROBIN",
    "protocol": "HTTP",
    "description": "Super Round Robin Pool",
    "admin_state_up": true,
    "session_persistence": {
      "cookie_name": "ChocolateChip",
      "type": "APP_COOKIE"
    },
    "listener_id": "023f2e34-7806-443b-bfae-16c324569a3d",
    "name": "super-pool",
    "tags": ["test_tag"],
    "tls_container_ref": "http://198.51.100.10:9311/v1/containers/4073846",
    "ca_tls_container_ref": "http://198.51.100.10:9311/v1/containers/5f0c",
    "crl_container_ref": "http://198.51.100.10:9311/v1/containers/6faf0ae",
    "tls_enabled": true,
    "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
    "tls_versions": ["TLSv1.2", "TLSv1.3"],
    "alpn_protocols": ["http/1.1", "http/1.0"]
  }
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: http/1.0, http/1.1, h2 <b>New in version 2.24</b>
ca_tls_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA certificate bundle for <b>tls_enabled</b> pools. <b>New in version 2.8</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
crl_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA revocation list file for <b>tls_enabled</b> pools.
description	body	string	A human-readable description for the resource.
healthmonitor_id	body	uuid	The associated health monitor ID.
id	body	uuid	The ID of the pool.

Name	In	Type	Description
lb_algorithm	body	string	The load balancing algorithm for the pool. One of <b>LEAST_CONNECTIONS</b> , <b>ROUND_ROBIN</b> , <b>SOURCE_IP</b> , <b>SOURCE_IP_PORT</b> .
listeners	body	array	A list of listener IDs.
loadbalancers	body	array	A list of load balancer IDs.
members	body	array	A list of member IDs.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PROXY</b> , <b>PROXYV2</b> , <b>SCTP</b> , <b>TCP</b> , or <b>UDP</b> .
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
session_persistence	body	object	A JSON object specifying the session persistence for the pool or <b>null</b> for no session persistence. See <a href="#">Pool Session Persistence</a> . Default is <b>null</b> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
tls_enabled	body	boolean	When <b>true</b> connections to backend member servers will use TLS encryption. Default is <b>false</b> . <b>New in version 2.8</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_container_ref	body	string	The reference to the <a href="#">key manager service</a> secret containing a PKCS12 format certificate/key bundle for <b>tls_enabled</b> pools for TLS client authentication to the member servers. <b>New in version 2.8</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: SSLv3, TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

## Response Example

```
{
  "pool": {
    "lb_algorithm": "ROUND_ROBIN",
    "protocol": "HTTP",
    "description": "Super Round Robin Pool",
    "admin_state_up": true,
    "loadbalancers": [
      {
        "name": "lb1"
      }
    ],
    "members": [
      {
        "ip": "192.168.1.100",
        "port": 80
      },
      {
        "ip": "192.168.1.101",
        "port": 80
      }
    ]
  }
}
```

```

        {
          "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
        }
      ],
      "created_at": "2017-05-10T18:14:44",
      "provisioning_status": "ACTIVE",
      "updated_at": "2017-05-10T23:08:12",
      "session_persistence": {
        "cookie_name": "ChocolateChip",
        "type": "APP_COOKIE"
      },
      "listeners": [
        {
          "id": "023f2e34-7806-443b-bfae-16c324569a3d"
        }
      ],
      "members": [],
      "healthmonitor_id": null,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "id": "4029d267-3983-4224-a3d0-afb3fe16a2cd",
      "operating_status": "ONLINE",
      "name": "super-pool",
      "tags": ["test_tag"],
      "tls_container_ref": "http://198.51.100.10:9311/v1/containers/407384e",
      "ca_tls_container_ref": "http://198.51.100.10:9311/v1/containers/5f0c",
      "crl_container_ref": "http://198.51.100.10:9311/v1/containers/6faf0ae",
      "tls_enabled": true,
      "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
      "tls_versions": ["TLSv1.2", "TLSv1.3"],
      "alpn_protocols": ["http/1.1", "http/1.0"]
    }
  }
}

```

**GET**  
 /v2/lbaas/pools/ **{pool\_id}**

#### Show Pool details

detail

Shows the details of a pool.

If you are not an administrative user and the parent load balancer does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

#### Success

Code	Reason
<b>200 - OK</b>	Request was successful.

#### Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

#### Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
pool_id	path	uuid	The ID of the pool to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/poc
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: http/1.0, http/1.1, h2 <b>New in version 2.24</b>
ca_tls_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA certificate bundle for <b>tls_enabled</b> pools. <b>New in version 2.8</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
crl_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA revocation list file for <b>tls_enabled</b> pools.
description	body	string	A human-readable description for the resource.
healthmonitor_id	body	uuid	The associated health monitor ID.
id	body	uuid	The ID of the pool.
lb_algorithm	body	string	The load balancing algorithm for the pool. One of <b>LEAST_CONNECTIONS</b> , <b>ROUND_ROBIN</b> , <b>SOURCE_IP</b> , <b>SOURCE_IP_PORT</b> .
listeners	body	array	A list of listener IDs.
loadbalancers	body	array	A list of load balancer IDs.
members	body	array	A list of member IDs.
name	body	string	Human-readable name of the resource.

Name	In	Type	Description
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PROXY</b> , <b>PROXYV2</b> , <b>SCTP</b> , <b>TCP</b> , or <b>UDP</b> .
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
session_persistence	body	object	A JSON object specifying the session persistence for the pool or <b>null</b> for no session persistence. See <a href="#">Pool Session Persistence</a> . Default is <b>null</b> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
tls_enabled	body	boolean	When <b>true</b> connections to backend member servers will use TLS encryption. Default is <b>false</b> . <b>New in version 2.8</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_container_ref	body	string	The reference to the <a href="#">key manager service</a> secret containing a PKCS12 format certificate/key bundle for <b>tls_enabled</b> pools for TLS client authentication to the member servers. <b>New in version 2.8</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: SSLv3, TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

## Response Example

```
{
  "pool": {
    "lb_algorithm": "ROUND_ROBIN",
    "protocol": "HTTP",
    "description": "Super Round Robin Pool",
    "admin_state_up": true,
    "loadbalancers": [
      {
        "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
      }
    ],
    "created_at": "2017-05-10T18:14:44",
    "provisioning_status": "ACTIVE",
    "updated_at": "2017-05-10T23:08:12",
    "session_persistence": {
      "cookie_name": "ChocolateChip",
      "type": "APP_COOKIE"
    },
    "listeners": [
      {
        "id": "023f2e34-7806-443b-bfae-16c324569a3d"
      }
    ],
    "members": [
      {
        "id": "12345678-9abc-deef-4321-1234567890ab"
      }
    ]
  }
}
```

```

        "members": [],
        "healthmonitor_id": null,
        "project_id": "e3cd678b11784734bc366148aa37580e",
        "id": "4029d267-3983-4224-a3d0-afb3fe16a2cd",
        "operating_status": "ONLINE",
        "name": "super-pool",
        "tags": ["test_tag"],
        "tls_container_ref": "http://198.51.100.10:9311/v1/containers/407384e",
        "ca_tls_container_ref": "http://198.51.100.10:9311/v1/containers/5f0c",
        "crl_container_ref": "http://198.51.100.10:9311/v1/containers/6faf0ac",
        "tls_enabled": false,
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
        "tls_versions": ["TLSv1.2", "TLSv1.3"],
        "alpn_protocols": ["http/1.1", "http/1.0"]
    }
}

```

**PUT**  
`/v2/lbaas/pools/ {pool_id}`  
**Update a Pool**

detail

Update an existing pool.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the update, check that the pool provisioning status is **ACTIVE**. If the status is **PENDING\_UPDATE**, use a GET operation to poll the pool object for changes.

This operation returns the updated pool object with the **ACTIVE**, **PENDING\_UPDATE**, or **ERROR** provisioning status.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .

Name	In	Type	Description
alpn_protocols (Optional)	body	array	A list of ALPN protocols. Available protocols: http/1.0, http/1.1, h2 <b>New in version 2.24</b>
ca_tls_container_ref (Optional)	body	string	The reference of the <a href="#">key manager service</a> secret contain a PEM format CA certificate bundle for <b>tls_enabled</b> pools. <b>New in version 2.8</b>
crl_container_ref (Optional)	body	string	The reference of the <a href="#">key manager service</a> secret contain a PEM format CA revocation list file for <b>tls_enabled</b> pools.
description (Optional)	body	string	A human-readable description for the resource.
lb_algorithm (Optional)	body	string	The load balancing algorithm for the pool. One of <b>LEAST_CONNECTIONS</b> , <b>ROUND_ROBIN</b> , or <b>SOURCE_IP</b> .
name (Optional)	body	string	Human-readable name of the resource.
pool_id	path	uuid	The ID of the pool to query.
session_persistence (Optional)	body	object	A JSON object specifying the session persistence for the pool or <b>null</b> for no session persistence. See <a href="#">Pool Session Persistence</a> . Default is <b>null</b> .
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
tls_enabled (Optional)	body	boolean	When <b>true</b> connections to backend member servers will use TLS encryption. Default is <b>false</b> . <b>New in version 2.8</b>
tls_ciphers (Optional)	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_container_ref (Optional)	body	string	The reference to the <a href="#">key manager service</a> secret contain a PKCS12 format certificate/key bundle for <b>tls_enabled</b> pools for TLS client authentication to the member servers. <b>New in version 2.8</b>
tls_versions (Optional)	body	array	A list of TLS protocol versions. Available versions: SSLv3, TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>

## Request Example

```
{
  "pool": {
    "lb_algorithm": "LEAST_CONNECTIONS",
    "session_persistence": {
      "type": "SOURCE_IP"
    },
    "description": "Super Least Connections Pool",
    "name": "super-least-conn-pool",
    "tags": ["updated_tag"],
    "tls_container_ref": "http://198.51.100.10:9311/v1/containers/c1cd501"
  }
}
```

```

        "ca_tls_container_ref": null,
        "crl_container_ref": null,
        "tls_enabled": false,
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
        "tls_versions": ["TLSv1.2", "TLSv1.3"],
        "alpn_protocols": ["http/1.1", "http/1.0"]
    }
}

```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
alpn_protocols	body	array	A list of ALPN protocols. Available protocols: http/1.0, http/1.1, h2 <b>New in version 2.24</b>
ca_tls_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA certificate bundle for <b>tls_enabled</b> pools. <b>New in version 2.8</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
crl_container_ref	body	string	The reference of the <a href="#">key manager service</a> secret containing a PEM format CA revocation list file for <b>tls_enabled</b> pools.
description	body	string	A human-readable description for the resource.
healthmonitor_id	body	uuid	The associated health monitor ID.
id	body	uuid	The ID of the pool.
lb_algorithm	body	string	The load balancing algorithm for the pool. One of <b>LEAST_CONNECTIONS</b> , <b>ROUND_ROBIN</b> , <b>SOURCE_IP</b> , <b>SOURCE_IP_PORT</b> .
listeners	body	array	A list of listener IDs.
loadbalancers	body	array	A list of load balancer IDs.
members	body	array	A list of member IDs.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.

Name	In	Type	Description
protocol	body	string	The protocol for the resource. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PROXY</b> , <b>PROXYV2</b> , <b>SCTP</b> , <b>TCP</b> , or <b>UDP</b> .
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
session_persistence	body	object	A JSON object specifying the session persistence for the pool or <b>null</b> for no session persistence. See <a href="#">Pool Session Persistence</a> . Default is <b>null</b> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
tls_enabled	body	boolean	When <b>true</b> connections to backend member servers will use TLS encryption. Default is <b>false</b> . <b>New in version 2.8</b>
tls_ciphers	body	string	List of ciphers in OpenSSL format (colon-separated). See <a href="https://www.openssl.org/docs/man1.1.1/man1/ciphers.html">https://www.openssl.org/docs/man1.1.1/man1/ciphers.html</a> <b>New in version 2.15</b>
tls_container_ref	body	string	The reference to the <a href="#">key manager service</a> secret containing a PKCS12 format certificate/key bundle for <b>tls_enabled</b> pools for TLS client authentication to the member servers. <b>New in version 2.8</b>
tls_versions	body	array	A list of TLS protocol versions. Available versions: SSLv3, TLSv1, TLSv1.1, TLSv1.2, TLSv1.3 <b>New in version 2.17</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

## Response Example

```
{
  "pool": {
    "lb_algorithm": "LEAST_CONNECTIONS",
    "protocol": "HTTP",
    "description": "Super Least Connections Pool",
    "admin_state_up": true,
    "loadbalancers": [
      {
        "id": "607226db-27ef-4d41-ae89-f2a800e9c2db"
      }
    ],
    "created_at": "2017-05-10T18:14:44",
    "provisioning_status": "PENDING_UPDATE",
    "updated_at": "2017-05-10T23:08:12",
    "session_persistence": {
      "cookie_name": null,
      "type": "SOURCE_IP"
    },
    "listeners": [
      {
        "id": "023f2e34-7806-443b-bfae-16c324569a3d"
      }
    ],
    "members": [],
    "healthmonitor_id": null,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "id": "4029d267-3983-4224-a3d0-afb3fe16a2cd",
    "operating_status": "ONLINE",
    "name": "super-least-conn-pool",
    "tags": []
  }
}
```

```

        "tags": ["updated_tag"],
        "tls_container_ref": "http://198.51.100.10:9311/v1/containers/c1cd501",
        "ca_tls_container_ref": null,
        "crl_container_ref": null,
        "tls_enabled": false,
        "tls_ciphers": "ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256",
        "tls_versions": ["TLSv1.2", "TLSv1.3"],
        "alpn_protocols": ["http/1.1", "http/1.0"]
    }
}

```

**DELETE**  
/v2/lbaas/pools/ **{pool\_id}**  
**Remove a Pool**

detail

Removes a pool and its associated configuration from the load balancer.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
pool_id	path	uuid	The ID of the pool to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

## Members

GET

/v2/lbaas/pools/ {pool\_id} /members

### List Members

detail

Lists all members for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list members for other projects.

The list might be empty.

### Success

Code	Reason
<b>200 - OK</b>	Request was successful.

### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

### Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
pool_id	path	uuid	The ID of the pool to query.
project_id (Optional)	query	string	The ID of the project to query.

### Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/poc
```

### Response Parameters

Name	In	Type	Description
address	body	string	The IP address of the backend member server.
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
backup	body	boolean	Is the member a backup? Backup members only receive traffic when all non-backup members are down. <b>New in version 2.1</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the member.
monitor_address	body	string	An alternate IP address used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>address</b> .
monitor_port	body	integer	An alternate protocol port used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>protocol_port</b> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol_port	body	integer	The protocol port number the backend member server is listening on.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
subnet_id	body	uuid	The subnet ID the member service is accessible from.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

Name	In	Type	Description
weight	body	integer	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool. For example, a member with a weight of 10 receives five times as many requests as a member with a weight of 2. A value of 0 means the member does not receive new connections but continues to service existing connections. A valid value is from <b>0</b> to <b>256</b> . Default is 1.
vnic_type	body	string	The member vNIC type used for the member port. One of <b>normal</b> or <b>direct</b> . <b>New in version 2.29</b>

## Response Example

```
{
  "members": [
    {
      "monitor_port": 8080,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "name": "web-server-1",
      "weight": 20,
      "backup": false,
      "admin_state_up": true,
      "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
      "created_at": "2017-05-11T17:21:34",
      "provisioning_status": "ACTIVE",
      "monitor_address": null,
      "updated_at": "2017-05-11T17:21:37",
      "address": "192.0.2.16",
      "protocol_port": 80,
      "id": "957a1ace-1bd2-449b-8455-820b6e4b63f3",
      "operating_status": "NO_MONITOR",
      "tags": ["test_tag"],
      "vnic_type": "normal"
    }
  ]
}
```

POST  
/v2/lbaas/pools/ **{pool\_id}** /members  
**Create Member**

[detail](#)

This operation provisions a member and adds it to a pool by using the configuration that you define in the request object. After the API validates the request and starts the provisioning process, it returns a response object, which contains a unique ID.

In the response, the member [provisioning\\_status](#) is **ACTIVE**, **PENDING\_CREATE**, or **ERROR**.

If the status is **PENDING\_CREATE**, issue GET **/v2/lbaas/pools/{pool\_id}/members/{member\_id}** to view the progress of the provisioning operation. When the member status changes to **ACTIVE**, the member is successfully provisioned and is ready for further configuration.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

At a minimum, you must specify these member attributes:

- **address**. The IP address of the backend member to receive traffic from the load balancer.
- **protocol\_port** The port on which the backend member listens for traffic.

Some attributes receive default values if you omit them from the request:

- **admin\_state\_up**. Default is **true**.
- **backup**. Default is **false**.
- **weight**. Default is **1**.

If you omit the **subnet\_id** parameter, the **vip\_subnet\_id** for the parent load balancer will be used for the member subnet UUID.

The member **address** does not necessarily need to be a member of the **subnet\_id** subnet. Members can be routable from the subnet specified either via the default route or by using **host\_routes** defined on the subnet.

Administrative users can specify a project ID that is different than their own to create members for other projects.

**monitor\_address** and/or **monitor\_port** can be used to have the health monitor, if one is configured for the pool, connect to an alternate IP address and port when executing a health check on the member.

To create a member, the load balancer must have an **ACTIVE** provisioning status.

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is

Name	In	Type	Description
			<b>true.</b>
address	body	string	The IP address of the resource.
backup (Optional)	body	boolean	Is the member a backup? Backup members only receive traffic when all non-backup members are down. <b>New in version 2.1</b>
monitor_address (Optional)	body	string	An alternate IP address used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>address</b> .
monitor_port (Optional)	body	integer	An alternate protocol port used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>protocol_port</b> .
name (Optional)	body	string	Human-readable name of the resource.
pool_id	path	uuid	The ID of the pool to query.
project_id (Optional)	body	string	The ID of the project owning this resource. (deprecated)
protocol_port	body	integer	The protocol port number for the resource.
request_sriov (Optional)	body	boolean	Request that an SR-IOV VF be used for the member network port. Defaults to <b>false</b> . <b>New in version 2.29</b>
subnet_id (Optional)	body	uuid	The subnet ID the member service is accessible from.
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
weight (Optional)	body	integer	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool. For example, a member with a weight of 10 receives five times as many requests as a member with a weight of 2. A value of 0 means the member does not receive new connections but continues to service existing connections. A valid value is from <b>0</b> to <b>256</b> . Default is <b>1</b> .

## Request Example

```
{
  "member": {
    "name": "web-server-1",
    "weight": "20",
    "admin_state_up": true,
    "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
    "address": "192.0.2.16",
    "protocol_port": "80",
    "monitor_port": 8080,
    "backup": false,
```

```

        "tags": ["test_tag"]
    }
}

```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
address	body	string	The IP address of the backend member server.
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
backup	body	boolean	Is the member a backup? Backup members only receive traffic when all non-backup members are down. <b>New in version 2.1</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the member.
monitor_address	body	string	An alternate IP address used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>address</b> .
monitor_port	body	integer	An alternate protocol port used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>protocol_port</b> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol_port	body	integer	The protocol port number the backend member server is listening on.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
subnet_id	body	uuid	The subnet ID the member service is accessible from.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>

Name	In	Type	Description
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
weight	body	integer	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool. For example, a member with a weight of 10 receives five times as many requests as a member with a weight of 2. A value of 0 means the member does not receive new connections but continues to service existing connections. A valid value is from 0 to 256. Default is 1.
vnic_type	body	string	The member vNIC type used for the member port. One of <b>normal</b> or <b>direct</b> . <b>New in version 2.29</b>

## Response Example

```
{
  "member": {
    "monitor_port": 8080,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "name": "web-server-1",
    "weight": 20,
    "backup": false,
    "admin_state_up": true,
    "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
    "created_at": "2017-05-11T17:21:34",
    "provisioning_status": "ACTIVE",
    "monitor_address": null,
    "updated_at": "2017-05-11T17:21:37",
    "address": "192.0.2.16",
    "protocol_port": 80,
    "id": "957a1ace-1bd2-449b-8455-820b6e4b63f3",
    "operating_status": "NO_MONITOR",
    "tags": ["test_tag"],
    "vnic_type": "normal"
  }
}
```

GET

/v2/lbaas/pools/ {pool\_id} /members/ {member-id}

Show Member details

detail

Shows the details of a pool member.

If you are not an administrative user and the parent load balancer does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

## Success

Code	Reason
200 - OK	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
member_id	path	uuid	The ID of the member to query.
pool_id	path	uuid	The ID of the pool to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/poc
```

## Response Parameters

Name	In	Type	Description
address	body	string	The IP address of the backend member server.
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
backup	body	boolean	Is the member a backup? Backup members only receive traffic when all non-backup members are down. <b>New in version 2.1</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the member.
monitor_address	body	string	An alternate IP address used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>address</b> .
monitor_port	body	integer	An alternate protocol port used for health monitoring a backend member. Default is

Name	In	Type	Description
			<b>null</b> which monitors the member <b>protocol_port</b> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol_port	body	integer	The protocol port number the backend member server is listening on.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
subnet_id	body	uuid	The subnet ID the member service is accessible from.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
weight	body	integer	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool. For example, a member with a weight of 10 receives five times as many requests as a member with a weight of 2. A value of 0 means the member does not receive new connections but continues to service existing connections. A valid value is from <b>0</b> to <b>256</b> . Default is <b>1</b> .
vnic_type	body	string	The member vNIC type used for the member port. One of <b>normal</b> or <b>direct</b> . <b>New in version 2.29</b>

## Response Example

```
{
  "member": {
    "monitor_port": 8080,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "name": "web-server-1",
    "weight": 20,
    "backup": false,
    "admin_state_up": true,
    "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
    "created_at": "2017-05-11T17:21:34",
    "provisioning_status": "ACTIVE",
    "monitor_address": null,
    "updated_at": "2017-05-11T17:21:37",
    "address": "192.0.2.16",
    "protocol_port": 80,
    "id": "957a1ace-1bd2-449b-8455-820b6e4b63f3",
    "operating_status": "NO_MONITOR",
    "tags": ["test_tag"],
    "vnic_type": "normal"
  }
}
```

```
}
```

**PUT**  
`/v2/lbaas/pools/ {pool_id} /members/ {member_id}`  
**Update a Member**

detail

Update an existing member.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the update, check that the member provisioning status is **ACTIVE**. If the status is **PENDING\_UPDATE**, use a GET operation to poll the member object for changes.

Setting the member weight to **0** means that the member will not receive new requests but will finish any existing connections. This "drains" the backend member of active connections.

This operation returns the updated member object with the **ACTIVE**, **PENDING\_UPDATE**, or **ERROR** provisioning status.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
backup (Optional)	body	boolean	Is the member a backup? Backup members only receive traffic when all non-backup members are down. <b>New in version 2.1</b>
member_id	path	uuid	The ID of the member to query.

Name	In	Type	Description
monitor_address (Optional)	body	string	An alternate IP address used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>address</b> .
monitor_port (Optional)	body	integer	An alternate protocol port used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>protocol_port</b> .
name (Optional)	body	string	Human-readable name of the resource.
pool_id	path	uuid	The ID of the pool to query.
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
weight (Optional)	body	integer	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool. For example, a member with a weight of 10 receives five times as many requests as a member with a weight of 2. A value of 0 means the member does not receive new connections but continues to service existing connections. A valid value is from <b>0</b> to <b>256</b> . Default is <b>1</b> .

## Request Example

```
{
  "member": {
    "name": "web-server-1-2",
    "weight": "0",
    "admin_state_up": "true",
    "monitor_address": "192.0.2.40",
    "monitor_port": 8888,
    "backup": false,
    "tags": ["updated_tag"]
  }
}
```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
address	body	string	The IP address of the backend member server.
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
backup	body	boolean	Is the member a backup? Backup members only receive traffic when all non-backup

Name	In	Type	Description
			members are down. <b>New in version 2.1</b>
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the member.
monitor_address	body	string	An alternate IP address used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>address</b> .
monitor_port	body	integer	An alternate protocol port used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>protocol_port</b> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
protocol_port	body	integer	The protocol port number the backend member server is listening on.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
subnet_id	body	uuid	The subnet ID the member service is accessible from.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
weight	body	integer	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool. For example, a member with a weight of 10 receives five times as many requests as a member with a weight of 2. A value of 0 means the member does not receive new connections but continues to service existing connections. A valid value is from <b>0</b> to <b>256</b> . Default is <b>1</b> .
vnic_type	body	string	The member vNIC type used for the member port. One of <b>normal</b> or <b>direct</b> . <b>New in version 2.29</b>

Response Example

```

{
  "member": {
    "monitor_port": 8080,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "name": "web-server-1",
    "weight": 20,
    "backup": false,
    "admin_state_up": true,
    "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
    "created_at": "2017-05-11T17:21:34",
    "provisioning_status": "PENDING_UPDATE",
    "monitor_address": null,
    "updated_at": "2017-05-11T17:21:37",
    "address": "192.0.2.16",
    "protocol_port": 80,
    "id": "957a1ace-1bd2-449b-8455-820b6e4b63f3",
    "operating_status": "NO_MONITOR",
    "tags": ["updated_tag"],
    "vnic_type": "normal"
  }
}

```

**PUT**  
/v2/lbaas/pools/ **{pool\_id}** /members  
**Batch Update Members**

detail

Set the state of members for a pool in one API call. This may include creating new members, deleting old members, and updating existing members. Existing members are matched based on address/port combination.

For example, assume a pool currently has two members. These members have the following address/port combinations: '192.0.2.15:80' and '192.0.2.16:80'. Now assume a PUT request is made that includes members with address/port combinations: '192.0.2.16:80' and '192.0.2.17:80'.

The member '192.0.2.15:80' will be deleted, because it was not in the request.

The member '192.0.2.16:80' will be updated to match the request data for that member, because it was matched.

The member '192.0.2.17:80' will be created, because no such member existed.

The optional parameter **additive\_only** when defined as **true** will skip deletions for members missing from the provided list. If this were set in the above example, the member '192.0.2.15:80' would have remained in the pool.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the updates, check that the member provisioning statuses are **ACTIVE** for new or updated members, and that any unspecified members were correctly deleted. If the statuses are **PENDING\_UPDATE** or **PENDING\_DELETE**, use GET to poll the member objects for changes.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
additive_only (Optional)	query	boolean	If <b>true</b> no members will be deleted during the batch operation.  <b>New in version 2.11</b>
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
address	body	string	The IP address of the resource.
backup (Optional)	body	boolean	Is the member a backup? Backup members only receive traffic when all non-backup members are down.  <b>New in version 2.1</b>
monitor_address (Optional)	body	string	An alternate IP address used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>address</b> .
monitor_port (Optional)	body	integer	An alternate protocol port used for health monitoring a backend member. Default is <b>null</b> which monitors the member <b>protocol_port</b> .
name (Optional)	body	string	Human-readable name of the resource.
pool_id	path	uuid	The ID of the pool to query.
project_id (Optional)	body	string	The ID of the project owning this resource. (deprecated)
protocol_port	body	integer	The protocol port number for the resource.
request_sriov (Optional)	body	boolean	Request that an SR-IOV VF be used for the member network port. Defaults to <b>false</b> .  <b>New in version 2.29</b>
subnet_id (Optional)	body	uuid	The subnet ID the member service is accessible from.

Name	In	Type	Description
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
weight (Optional)	body	integer	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool. For example, a member with a weight of 10 receives five times as many requests as a member with a weight of 2. A value of 0 means the member does not receive new connections but continues to service existing connections. A valid value is from 0 to 256. Default is 1.

## Request Example

```
{
  "members": [
    {
      "name": "web-server-1",
      "weight": 20,
      "admin_state_up": true,
      "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
      "address": "192.0.2.16",
      "protocol_port": 80,
      "monitor_port": 8080,
      "tags": ["updated_tag"]
    },
    {
      "name": "web-server-2",
      "weight": 10,
      "admin_state_up": true,
      "subnet_id": "bbb35f84-35cc-4b2f-84c2-a6a29bba68aa",
      "address": "192.0.2.17",
      "protocol_port": 80,
      "monitor_port": 8080,
      "tags": ["updated_tag"]
    }
  ]
}
```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response

There is no body content for the response of a successful PUT request.

**DELETE**  
**/v2/lbaas/pools/ {pool\_id} /members/ {member\_id}**  
**Remove a Member**

detail

Removes a member and its associated configuration from the pool.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
member_id	path	uuid	The ID of the member to query.
pool_id	path	uuid	The ID of the pool to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

## Health Monitor

```
GET  
/v2/lbaas/healthmonitors  
List Health Monitors
```

detail

Lists all health monitors for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list health monitors for other projects.

The list might be empty.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.
Error	
Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
project_id (Optional)	query	string	The ID of the project to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/he
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
delay	body	integer	The time, in seconds, between sending probes to members.
domain_name	body	string	The domain name, which be injected into the HTTP Host Header to the backend server for HTTP health check. <b>New in version 2.10</b>
expected_codes	body	string	The list of HTTP status codes expected in response from the member to declare it healthy. Specify one of the following values: <ul style="list-style-type: none"> <li>• A single value, such as <b>200</b></li> <li>• A list, such as <b>200, 202</b></li> </ul>

Name	In	Type	Description
			<ul style="list-style-type: none"> <li>• A range, such as <b>200-204</b></li> </ul>
http_method	body	string	The HTTP method that the health monitor uses for requests. One of <b>CONNECT</b> , <b>DELETE</b> , <b>GET</b> , <b>HEAD</b> , <b>OPTIONS</b> , <b>PATCH</b> , <b>POST</b> , <b>PUT</b> , or <b>TRACE</b> .
http_version	body	float	The HTTP version. One of <b>1.0</b> or <b>1.1</b> . The default is <b>1.0</b> . <b>New in version 2.10</b>
id	body	uuid	The associated health monitor ID.
max_retries	body	integer	The number of successful checks before changing the <b>operating status</b> of the member to <b>ONLINE</b> . A valid value is from <b>1</b> to <b>10</b> .
max_retries_down	body	integer	The number of allowed check failures before changing the <b>operating status</b> of the member to <b>ERROR</b> . A valid value is from <b>1</b> to <b>10</b> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pool_id	body	uuid	The ID of the pool.
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout	body	integer	The maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
type	body	string	The type of health monitor. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PING</b> , <b>SCTP</b> , <b>TCP</b> , <b>TLS-HELLO</b> , or <b>UDP-CONNECT</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
url_path	body	string	The HTTP URL path of the request sent by the monitor to test the health of a backend member. Must be a string that begins with a forward slash (/).

## Response Example

```
{
  "healthmonitors": [
    {
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "name": "super-pool-health-monitor",
      "admin_state_up": true,
      "pools": [
        {
          "id": "4029d267-3983-4224-a3d0-afb3fe16a2cd"
        }
      ],
      "created_at": "2017-05-11T23:53:47",
      "provisioning_status": "ACTIVE",
      "updated_at": "2017-05-11T23:53:47",
      "delay": 10,
      "expected_codes": "200",
      "max_retries": 1,
      "http_method": "GET",
      "timeout": 5,
      "max_retries_down": 3,
      "url_path": "/",
      "type": "HTTP",
      "id": "8ed3c5ac-6efa-420c-bedb-99ba14e58db5",
      "operating_status": "ONLINE",
      "tags": ["test_tag"],
      "http_version": 1.0,
      "domain_name": null
    }
  ]
}
```

**POST**  
**/v2/lbaas/healthmonitors**  
**Create Health Monitor**

detail

Creates a health monitor on a pool.

Health monitors define how the load balancer monitors backend servers to determine if they are available to service requests.

This operation provisions a new health monitor by using the configuration that you define in the request object. After the API validates the request and starts the provisioning process, the API returns a response object that contains a unique ID and the status of provisioning the health monitor.

In the response, the health monitor [provisioning\\_status](#) is **ACTIVE**, **PENDING\_CREATE**, or **ERROR**.

If the status is **PENDING\_CREATE**, issue GET [/v2/lbaas/healthmonitors/{healthmonitor\\_id}](#) to view the progress of the provisioning operation. When the health monitor status changes to **ACTIVE**, the health monitor is successfully provisioned and is ready for further configuration.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

Specifying a project\_id is deprecated. The health monitor will inherit the project\_id of the parent load balancer.

At a minimum, you must specify these health monitor attributes:

- **delay** The interval, in seconds, between health checks.

- **max\_retries** The number of successful checks before changing the operating status of the member to ONLINE.
- **pool\_id** The pool to monitor.
- **timeout** The time, in seconds, after which a health check times out.
- **type** The type of health monitor. One of **HTTP**, **HTTPS**, **PING**, **SCTP**, **TCP**, **TLS-HELLO**, or **UDP-CONNECT**.

Some attributes receive default values if you omit them from the request:

- **admin\_state\_up** The default is **true**.
- **expected\_codes** The expected HTTP status codes to get from a successful health check. The default is **200**.
- **http\_method** The default is **GET**.
- **http\_version** The default is **1.0**.
- **max\_retries\_down** The default is **3**.
- **url\_path** The default is **/**.

To create a health monitor, the parent load balancer must have an **ACTIVE** provisioning status.

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
delay	body	integer	The time, in seconds, between sending probes to members.
domain_name (Optional)	body	string	The domain name, which will be injected into the HTTP Host Header to the backend

Name	In	Type	Description
			<p>server for HTTP health check.</p> <p><b>New in version 2.10</b></p>
expected_codes (Optional)	body	string	<p>The list of HTTP status codes expected in response from the member to declare it healthy. Specify one of the following values:</p> <ul style="list-style-type: none"> <li>• A single value, such as <code>200</code></li> <li>• A list, such as <code>200, 202</code></li> <li>• A range, such as <code>200-204</code></li> </ul> <p>The default is <code>200</code>.</p>
http_method (Optional)	body	string	The HTTP method that the health monitor uses for requests. One of <code>CONNECT</code> , <code>DELETE</code> , <code>GET</code> , <code>HEAD</code> , <code>OPTIONS</code> , <code>PATCH</code> , <code>POST</code> , <code>PUT</code> , or <code>TRACE</code> . The default is <code>GET</code> .
http_version (Optional)	body	float	<p>The HTTP version. One of <code>1.0</code> or <code>1.1</code>. The default is <code>1.0</code>.</p> <p><b>New in version 2.10</b></p>
name (Optional)	body	string	Human-readable name of the resource.
max_retries	body	integer	The number of successful checks before changing the <code>operating status</code> of the member to <code>ONLINE</code> . A valid value is from <code>1</code> to <code>10</code> .
max_retries_down (Optional)	body	integer	The number of allowed check failures before changing the <code>operating status</code> of the member to <code>ERROR</code> . A valid value is from <code>1</code> to <code>10</code> . The default is <code>3</code> .
pool_id	body	uuid	The ID of the pool.
project_id (Optional)	body	string	The ID of the project owning this resource. (deprecated)
tags (Optional)	body	array	<p>A list of simple strings assigned to the resource.</p> <p><b>New in version 2.5</b></p>
timeout	body	integer	The maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
type	body	string	The type of health monitor. One of <code>HTTP</code> , <code>HTTPS</code> , <code>PING</code> , <code>SCTP</code> , <code>TCP</code> , <code>TLS-HELLO</code> , or <code>UDP-CONNECT</code> .
url_path (Optional)	body	string	The HTTP URL path of the request sent by the monitor to test the health of a backend member. Must be a string that begins with a forward slash ( <code>/</code> ). The default URL path is <code>/</code> .

## Request Example

```
{  
    "healthmonitor": {  
        "name": "super-pool-health-monitor",  
        "admin_state_up": true,  
        "pool_id": "4029d267-3983-4224-a3d0-afb3fe16a2cd",  
        "delay": "10",  
        "expected_codes": "200",  
        "max_retries": "1",  
        "http_method": "GET",  
        "timeout": "5",  
        "url_path": "/",  
        "type": "HTTP",  
        "max_retries_down": 3,  
        "tags": ["test_tag"],  
        "http_version": 1.1,  
        "domain_name": "testlab.com"  
    }  
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
delay	body	integer	The time, in seconds, between sending probes to members.
domain_name	body	string	The domain name, which be injected into the HTTP Host Header to the backend server for HTTP health check. <b>New in version 2.10</b>
expected_codes	body	string	The list of HTTP status codes expected in response from the member to declare it healthy. Specify one of the following values: <ul style="list-style-type: none"><li>• A single value, such as <b>200</b></li><li>• A list, such as <b>200, 202</b></li><li>• A range, such as <b>200-204</b></li></ul>
http_method	body	string	The HTTP method that the health monitor uses for requests. One of <b>CONNECT</b> , <b>DELETE</b> , <b>GET</b> , <b>HEAD</b> , <b>OPTIONS</b> , <b>PATCH</b> , <b>POST</b> , <b>PUT</b> , or <b>TRACE</b> .
http_version	body	float	The HTTP version. One of <b>1.0</b> or <b>1.1</b> . The default is <b>1.0</b> . <b>New in version 2.10</b>
id	body	uuid	The associated health monitor ID.

Name	In	Type	Description
max_retries	body	integer	The number of successful checks before changing the <b>operating status</b> of the member to <b>ONLINE</b> . A valid value is from <b>1</b> to <b>10</b> .
max_retries_down	body	integer	The number of allowed check failures before changing the <b>operating status</b> of the member to <b>ERROR</b> . A valid value is from <b>1</b> to <b>10</b> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pool_id	body	uuid	The ID of the pool.
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout	body	integer	The maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
type	body	string	The type of health monitor. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PING</b> , <b>SCTP</b> , <b>TCP</b> , <b>TLS-HELLO</b> , or <b>UDP-CONNECT</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
url_path	body	string	The HTTP URL path of the request sent by the monitor to test the health of a backend member. Must be a string that begins with a forward slash (/).

## Response Example

```
{
  "healthmonitor": {
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "name": "super-pool-health-monitor",
    "admin_state_up": true,
    "pools": [
      {
        "id": "4029d267-3983-4224-a3d0-afb3fe16a2cd"
      }
    ],
    "created_at": "2017-05-11T23:53:47",
    "provisioning_status": "ACTIVE",
    "updated_at": "2017-05-11T23:53:47",
    "delay": 10,
    "expected_codes": "200",
    "max_retries": 1,
    "http_method": "GET",
    "timeout": 5,
    "max_retries_down": 3,
    "tags": []
  }
}
```

```

        "url_path": "/",
        "type": "HTTP",
        "id": "8ed3c5ac-6efa-420c-bedb-99ba14e58db5",
        "operating_status": "ONLINE",
        "tags": ["test_tag"],
        "http_version": 1.1,
        "domain_name": "testLab.com"
    }
}

```

**GET**  
**/v2/Ibaas/healthmonitors/ {healthmonitor\_id}**  
**Show Health Monitor details**

detail

Shows the details of a health monitor.

If you are not an administrative user and the parent load balancer does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
healthmonitor_id	path	uuid	The ID of the health monitor to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/he...
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
delay	body	integer	The time, in seconds, between sending probes to members.
domain_name	body	string	The domain name, which be injected into the HTTP Host Header to the backend server for HTTP health check. <b>New in version 2.10</b>
expected_codes	body	string	The list of HTTP status codes expected in response from the member to declare it healthy. Specify one of the following values: <ul style="list-style-type: none"> <li>• A single value, such as <b>200</b></li> <li>• A list, such as <b>200, 202</b></li> <li>• A range, such as <b>200-204</b></li> </ul>
http_method	body	string	The HTTP method that the health monitor uses for requests. One of <b>CONNECT</b> , <b>DELETE</b> , <b>GET</b> , <b>HEAD</b> , <b>OPTIONS</b> , <b>PATCH</b> , <b>POST</b> , <b>PUT</b> , or <b>TRACE</b> .
http_version	body	float	The HTTP version. One of <b>1.0</b> or <b>1.1</b> . The default is <b>1.0</b> . <b>New in version 2.10</b>
id	body	uuid	The associated health monitor ID.
max_retries	body	integer	The number of successful checks before changing the <b>operating status</b> of the member to <b>ONLINE</b> . A valid value is from <b>1</b> to <b>10</b> .
max_retries_down	body	integer	The number of allowed check failures before changing the <b>operating status</b> of the member to <b>ERROR</b> . A valid value is from <b>1</b> to <b>10</b> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pool_id	body	uuid	The ID of the pool.
project_id	body	string	The ID of the project owning this resource.

Name	In	Type	Description
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout	body	integer	The maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
type	body	string	The type of health monitor. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PING</b> , <b>SCTP</b> , <b>TCP</b> , <b>TLS-HELLO</b> , or <b>UDP-CONNECT</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
url_path	body	string	The HTTP URL path of the request sent by the monitor to test the health of a backend member. Must be a string that begins with a forward slash (/).

## Response Example

```
{
  "healthmonitor": {
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "name": "super-pool-health-monitor",
    "admin_state_up": true,
    "pools": [
      {
        "id": "4029d267-3983-4224-a3d0-afb3fe16a2cd"
      }
    ],
    "created_at": "2017-05-11T23:53:47",
    "provisioning_status": "ACTIVE",
    "updated_at": "2017-05-11T23:53:47",
    "delay": 10,
    "expected_codes": "200",
    "max_retries": 1,
    "http_method": "GET",
    "timeout": 5,
    "max_retries_down": 3,
    "url_path": "/",
    "type": "HTTP",
    "id": "8ed3c5ac-6efa-420c-bedb-99ba14e58db5",
    "operating_status": "ONLINE",
    "tags": ["test_tag"],
    "http_version": 1.0,
    "domain_name": null
  }
}
```

**PUT**  
**/v2/lbaas/healthmonitors/ {healthmonitor\_id}**  
**Update a Health Monitor**

detail

Update an existing health monitor.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the update, check that the health monitor provisioning status is **ACTIVE**. If the

status is **PENDING\_UPDATE**, use a GET operation to poll the health monitor object for changes.

This operation returns the updated health monitor object with the **ACTIVE**, **PENDING\_UPDATE**, or **ERROR** provisioning status.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
delay (Optional)	body	integer	The time, in seconds, between sending probes to members.
domain_name (Optional)	body	string	The domain name, which be injected into the HTTP Host Header to the backend server for HTTP health check. <b>New in version 2.10</b>
expected_codes (Optional)	body	string	The list of HTTP status codes expected in response from the member to declare it healthy. Specify one of the following values: <ul style="list-style-type: none"><li>• A single value, such as <b>200</b></li><li>• A list, such as <b>200, 202</b></li><li>• A range, such as <b>200-204</b></li></ul> The default is 200.
healthmonitor_id	path	uuid	The ID of the health monitor to query.
http_method (Optional)	body	string	The HTTP method that the health monitor uses for requests. One of <b>CONNECT</b> ,

Name	In	Type	Description
			<b>DELETE, GET, HEAD, OPTIONS, PATCH, POST, PUT, or TRACE.</b> The default is <b>GET</b> .
http_version (Optional)	body	float	The HTTP version. One of <b>1.0</b> or <b>1.1</b> . The default is <b>1.0</b> . <b>New in version 2.10</b>
max_retries (Optional)	body	integer	The number of successful checks before changing the <b>operating status</b> of the member to <b>ONLINE</b> . A valid value is from <b>1</b> to <b>10</b> .
max_retries_down (Optional)	body	integer	The number of allowed check failures before changing the <b>operating status</b> of the member to <b>ERROR</b> . A valid value is from <b>1</b> to <b>10</b> . The default is <b>3</b> .
name (Optional)	body	string	Human-readable name of the resource.
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
timeout (Optional)	body	integer	The maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
url_path (Optional)	body	string	The HTTP URL path of the request sent by the monitor to test the health of a backend member. Must be a string that begins with a forward slash (/). The default URL path is /.

## Request Example

```
{
  "healthmonitor": {
    "name": "super-pool-health-monitor-updated",
    "admin_state_up": true,
    "delay": 5,
    "expected_codes": "200",
    "http_method": "HEAD",
    "timeout": 2,
    "url_path": "/index.html",
    "max_retries": 2,
    "max_retries_down": 2,
    "tags": ["updated_tag"],
    "http_version": 1.1
  }
}
```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <code>true</code> ) or down ( <code>false</code> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
delay	body	integer	The time, in seconds, between sending probes to members.
domain_name	body	string	The domain name, which be injected into the HTTP Host Header to the backend server for HTTP health check.  <b>New in version 2.10</b>
expected_codes	body	string	The list of HTTP status codes expected in response from the member to declare it healthy. Specify one of the following values: <ul style="list-style-type: none"> <li>• A single value, such as <code>200</code></li> <li>• A list, such as <code>200, 202</code></li> <li>• A range, such as <code>200-204</code></li> </ul>
http_method	body	string	The HTTP method that the health monitor uses for requests. One of <code>CONNECT</code> , <code>DELETE</code> , <code>GET</code> , <code>HEAD</code> , <code>OPTIONS</code> , <code>PATCH</code> , <code>POST</code> , <code>PUT</code> , or <code>TRACE</code> .
http_version	body	float	The HTTP version. One of <code>1.0</code> or <code>1.1</code> . The default is <code>1.0</code> .  <b>New in version 2.10</b>
id	body	uuid	The associated health monitor ID.
max_retries	body	integer	The number of successful checks before changing the <code>operating_status</code> of the member to <code>ONLINE</code> . A valid value is from <code>1</code> to <code>10</code> .
max_retries_down	body	integer	The number of allowed check failures before changing the <code>operating_status</code> of the member to <code>ERROR</code> . A valid value is from <code>1</code> to <code>10</code> .
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
pool_id	body	uuid	The ID of the pool.
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource.  <b>New in version 2.5</b>

Name	In	Type	Description
timeout	body	integer	The maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
type	body	string	The type of health monitor. One of <b>HTTP</b> , <b>HTTPS</b> , <b>PING</b> , <b>SCTP</b> , <b>TCP</b> , <b>TLS-HELLO</b> , or <b>UDP-CONNECT</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
url_path	body	string	The HTTP URL path of the request sent by the monitor to test the health of a backend member. Must be a string that begins with a forward slash (/).

## Response Example

```
{
  "healthmonitor": {
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "name": "super-pool-health-monitor-updated",
    "admin_state_up": true,
    "pools": [
      {
        "id": "4029d267-3983-4224-a3d0-afb3fe16a2cd"
      }
    ],
    "created_at": "2017-05-11T23:53:47",
    "provisioning_status": "PENDING_UPDATE",
    "updated_at": "2017-05-11T23:53:47",
    "delay": 5,
    "expected_codes": "200",
    "max_retries": 2,
    "http_method": "HEAD",
    "timeout": 2,
    "max_retries_down": 2,
    "url_path": "/index.html",
    "type": "HTTP",
    "id": "8ed3c5ac-6efa-420c-bedb-99ba14e58db5",
    "operating_status": "ONLINE",
    "tags": ["updated_tag"],
    "http_version": 1.1,
    "domain_name": null
  }
}
```

**DELETE**  
/v2/lbaas/healthmonitors/ {healthmonitor\_id}  
**Remove a Health Monitor**

detail

Removes a health monitor and its associated configuration from the project.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
healthmonitor_id	path	uuid	The ID of the health monitor to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

## L7 Policies

```
GET  
/v2/lbaas/l7policies  
List L7 Policies
```

detail

Lists all L7 policies for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list L7 policies for other projects.

The list might be empty.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
project_id (Optional)	query	string	The ID of the project to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/17f
```

## Response Parameters

Name	In	Type	Description
action	body	string	The L7 policy action. One of <b>REDIRECT_PREFIX</b> , <b>REDIRECT_TO_POOL</b> , <b>REDIRECT_TO_URL</b> , or <b>REJECT</b> .
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
id	body	uuid	The ID of the L7 policy.
listener_id	body	uuid	The ID of the listener.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
position	body	integer	The position of this policy on the listener. Positions start at 1.
project_id	body	string	The ID of the project owning this resource.

Name	In	Type	Description
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
redirect_http_code	body	integer	Requests matching this policy will be redirected to the specified URL or Prefix URL with the HTTP response code. Valid if <b>action</b> is <b>REDIRECT_TO_URL</b> or <b>REDIRECT_PREFIX</b> . Valid options are: 301, 302, 303, 307, or 308. Default is 302. <b>New in version 2.9</b>
redirect_pool_id	body	uuid	Requests matching this policy will be redirected to the pool with this ID. Only valid if <b>action</b> is <b>REDIRECT_TO_POOL</b> . The pool has some restrictions, See <a href="#">Protocol Combinations (Listener/Pool)</a> .
redirect_prefix	body	string	Requests matching this policy will be redirected to this Prefix URL. Only valid if <b>action</b> is <b>REDIRECT_PREFIX</b> .
redirect_url	body	string	Requests matching this policy will be redirected to this URL. Only valid if <b>action</b> is <b>REDIRECT_TO_URL</b> .
rules	body	array	List of associated L7 rule IDs.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

## Response Example

```
{
  "17policies": [
    {
      "listener_id": "023f2e34-7806-443b-bfae-16c324569a3d",
      "description": "Redirect requests to example.com",
      "admin_state_up": true,
      "rules": [
        {
          "id": "efd6a3f8-73bf-47f0-8ae6-503ebda57372"
        }
      ],
      "created_at": "2017-06-24T23:25:14",
      "provisioning_status": "ACTIVE",
      "updated_at": "2017-06-24T23:30:05",
      "redirect_http_code": 302,
      "redirect_pool_id": null,
      "redirect_prefix": null,
      "redirect_url": "http://www.example.com",
      "action": "REDIRECT_TO_URL",
      "position": 1,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "id": "8a1412f0-4c32-4257-8b07-af4770b604fd",
      "operating_status": "ONLINE",
      "name": "redirect-example.com",
      "tags": ["test_tag"]
    }
  ]
}
```

POST

/v2/lbaas/l7policies

### Create an L7 Policy

detail

Creates a L7 policy.

This operation provisions a new L7 policy by using the configuration that you define in the request object. After the API validates the request and starts the provisioning process, the API returns a response object that contains a unique ID and the status of provisioning the L7 policy.

In the response, the L7 policy [provisioning\\_status](#) is **ACTIVE**, **PENDING\_CREATE**, or **ERROR**.

If the status is **PENDING\_CREATE**, issue GET [/v2/lbaas/l7policies/{l7policy\\_id}](#) to view the progress of the provisioning operation. When the L7 policy status changes to **ACTIVE**, the L7 policy is successfully provisioned and is ready for further configuration.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

All the rules associated with a given policy are logically ANDed together. A request must match all the policy's rules to match the policy.

If you need to express a logical OR operation between rules, then do this by creating multiple policies with the same action.

If a new policy is created with a position that matches that of an existing policy, then the new policy is inserted at the given position.

L7 policies with **action** of **REDIRECT\_TO\_URL** will return the default HTTP **Found (302)** response code with the **redirect\_url**. Also, specify **redirect\_http\_code** to configure the needed HTTP response code, such as, 301, 302, 303, 307 and 308.

L7 policies with **action** of **REJECT** will return a **Forbidden (403)** response code to the requester.

#### Note

Pools of type **SCTP**, **TCP** or **UDP** cannot be used in L7 policies at this time.

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.

Code	Reason
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
action	body	string	The L7 policy action. One of <b>REDIRECT_PREFIX</b> , <b>REDIRECT_TO_POOL</b> , <b>REDIRECT_TO_URL</b> , or <b>REJECT</b> .
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
description (Optional)	body	string	A human-readable description for the resource.
listener_id	body	uuid	The ID of the listener.
name (Optional)	body	string	Human-readable name of the resource.
position (Optional)	body	integer	The position of this policy on the listener. Positions start at 1.
project_id (Optional)	body	string	The ID of the project owning this resource.
redirect_http_code (Optional)	body	integer	Requests matching this policy will be redirected to the specified URL or Prefix URL with the HTTP response code. Valid if <b>action</b> is <b>REDIRECT_TO_URL</b> or <b>REDIRECT_PREFIX</b> . Valid options are: 301, 302, 303, 307, or 308. Default is 302. <b>New in version 2.9</b>
redirect_pool_id (Optional)	body	uuid	Requests matching this policy will be redirected to the pool with this ID. Only valid if <b>action</b> is <b>REDIRECT_TO_POOL</b> . The pool has some restrictions, See <a href="#">Protocol Combinations (Listener/Pool)</a> .
redirect_prefix (Optional)	body	string	Requests matching this policy will be redirected to this Prefix URL. Only valid if <b>action</b> is <b>REDIRECT_PREFIX</b> .
redirect_url (Optional)	body	string	Requests matching this policy will be redirected to this URL. Only valid if <b>action</b> is <b>REDIRECT_TO_URL</b> .

Name	In	Type	Description
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>

## Request Example

```
{
  "l7policy": {
    "description": "Redirect requests to example.com",
    "admin_state_up": true,
    "listener_id": "023f2e34-7806-443b-bfae-16c324569a3d",
    "redirect_url": "http://www.example.com",
    "redirect_http_code": 301,
    "name": "redirect-example.com",
    "action": "REDIRECT_TO_URL",
    "position": 1,
    "tags": ["test_tag"]
  }
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
action	body	string	The L7 policy action. One of <b>REDIRECT_PREFIX</b> , <b>REDIRECT_TO_POOL</b> , <b>REDIRECT_TO_URL</b> , or <b>REJECT</b> .
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
id	body	uuid	The ID of the L7 policy.
listener_id	body	uuid	The ID of the listener.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
position	body	integer	The position of this policy on the listener. Positions start at 1.
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .

Name	In	Type	Description
redirect_http_code	body	integer	<p>Requests matching this policy will be redirected to the specified URL or Prefix URL with the HTTP response code. Valid if <b>action</b> is <b>REDIRECT_TO_URL</b> or <b>REDIRECT_PREFIX</b>. Valid options are: 301, 302, 303, 307, or 308. Default is 302.</p> <p><b>New in version 2.9</b></p>
redirect_pool_id	body	uuid	<p>Requests matching this policy will be redirected to the pool with this ID. Only valid if <b>action</b> is <b>REDIRECT_TO_POOL</b>. The pool has some restrictions, See <a href="#">Protocol Combinations (Listener/Pool)</a>.</p>
redirect_prefix	body	string	<p>Requests matching this policy will be redirected to this Prefix URL. Only valid if <b>action</b> is <b>REDIRECT_PREFIX</b>.</p>
redirect_url	body	string	<p>Requests matching this policy will be redirected to this URL. Only valid if <b>action</b> is <b>REDIRECT_TO_URL</b>.</p>
rules	body	array	List of associated L7 rule IDs.
tags	body	array	<p>A list of simple strings assigned to the resource.</p> <p><b>New in version 2.5</b></p>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

## Response Example

```
{
  "l7policy": [
    {
      "listener_id": "023f2e34-7806-443b-bfae-16c324569a3d",
      "description": "Redirect requests to example.com",
      "admin_state_up": true,
      "rules": [
        {
          "id": "efd6a3f8-73bf-47f0-8ae6-503ebda57372"
        }
      ],
      "created_at": "2017-06-24T23:25:14",
      "provisioning_status": "PENDING_CREATE",
      "updated_at": "2017-06-24T23:30:05",
      "redirect_http_code": 301,
      "redirect_pool_id": null,
      "redirect_prefix": null,
      "redirect_url": "http://www.example.com",
      "action": "REDIRECT_TO_URL",
      "position": 1,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "id": "8a1412f0-4c32-4257-8b07-af4770b604fd",
      "operating_status": "OFFLINE",
      "name": "redirect-example.com",
      "tags": ["test_tag"]
    }
  ]
}
```

GET  
/v2/lbaas/l7policies/ **{l7policy\_id}**

## Show L7 Policy details

detail

Shows the details of a L7 policy.

If you are not an administrative user and the L7 policy object does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

Success

Code	Reason
<b>200 - OK</b>	Request was successful.

Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
l7policy_id	path	uuid	The ID of the L7 policy to query.

Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/l7p
```

Response Parameters

Name	In	Type	Description
action	body	string	The L7 policy action. One of <b>REDIRECT_PREFIX</b> , <b>REDIRECT_TO_POOL</b> , <b>REDIRECT_TO_URL</b> , or <b>REJECT</b> .

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <code>true</code> ) or down ( <code>false</code> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
id	body	uuid	The ID of the L7 policy.
listener_id	body	uuid	The ID of the listener.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
position	body	integer	The position of this policy on the listener. Positions start at 1.
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
redirect_http_code	body	integer	Requests matching this policy will be redirected to the specified URL or Prefix URL with the HTTP response code. Valid if <b>action</b> is <code>REDIRECT_TO_URL</code> or <code>REDIRECT_PREFIX</code> . Valid options are: 301, 302, 303, 307, or 308. Default is 302. <b>New in version 2.9</b>
redirect_pool_id	body	uuid	Requests matching this policy will be redirected to the pool with this ID. Only valid if <b>action</b> is <code>REDIRECT_TO_POOL</code> . The pool has some restrictions, See <a href="#">Protocol Combinations (Listener/Pool)</a> .
redirect_prefix	body	string	Requests matching this policy will be redirected to this Prefix URL. Only valid if <b>action</b> is <code>REDIRECT_PREFIX</code> .
redirect_url	body	string	Requests matching this policy will be redirected to this URL. Only valid if <b>action</b> is <code>REDIRECT_TO_URL</code> .
rules	body	array	List of associated L7 rule IDs.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

Response Example

```
{
  "l7policy": [
    {
      "listener_id": "023f2e34-7806-443b-bfae-16c324569a3d",
      "description": "Redirect requests to example.com",
      "admin_state_up": true,
      "rules": [
        {
          "id": "efd6a3f8-73bf-47f0-8ae6-503ebda57372"
        }
      ],
      "created_at": "2017-06-24T23:25:14",
      "provisioning_status": "ACTIVE",
      "updated_at": "2017-06-24T23:30:05",
      "redirect_http_code": 302,
      "redirect_pool_id": null,
      "redirect_prefix": null,
      "redirect_url": "http://www.example.com",
      "action": "REDIRECT_TO_URL",
      "position": 1,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "id": "8a1412f0-4c32-4257-8b07-af4770b604fd",
      "operating_status": "ONLINE",
      "name": "redirect-example.com",
      "tags": ["test_tag"]
    }
  ]
}
```

**PUT**  
`/v2/lbaas/l7policies/ {l7policy_id}`  
**Update a L7 Policy**

[detail](#)

Updates a L7 policy.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the update, check that the L7 policy provisioning status is **ACTIVE**. If the status is **PENDING\_UPDATE**, use a GET operation to poll the L7 policy object for changes.

This operation returns the updated L7 policy object with the **ACTIVE**, **PENDING\_UPDATE**, or **ERROR** provisioning status.

If a policy is updated with a position that matches that of an existing policy, then the updated policy is inserted at the given position.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.

Code	Reason
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
action (Optional)	body	string	The L7 policy action. One of <b>REDIRECT_PREFIX</b> , <b>REDIRECT_TO_POOL</b> , <b>REDIRECT_TO_URL</b> , or <b>REJECT</b> .
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
description (Optional)	body	string	A human-readable description for the resource.
l7policy_id	path	uuid	The ID of the L7 policy to query.
name (Optional)	body	string	Human-readable name of the resource.
position (Optional)	body	integer	The position of this policy on the listener. Positions start at 1.
redirect_http_code (Optional)	body	integer	Requests matching this policy will be redirected to the specified URL or Prefix URL with the HTTP response code. Valid if <b>action</b> is <b>REDIRECT_TO_URL</b> or <b>REDIRECT_PREFIX</b> . Valid options are: 301, 302, 303, 307, or 308. Default is 302. <b>New in version 2.9</b>
redirect_pool_id (Optional)	body	uuid	Requests matching this policy will be redirected to the pool with this ID. Only valid if <b>action</b> is <b>REDIRECT_TO_POOL</b> . The pool has some restrictions, See <a href="#">Protocol Combinations (Listener/Pool)</a> .
redirect_prefix (Optional)	body	string	Requests matching this policy will be redirected to this Prefix URL. Only valid if <b>action</b> is <b>REDIRECT_PREFIX</b> .
redirect_url (Optional)	body	string	Requests matching this policy will be redirected to this URL. Only valid if <b>action</b> is <b>REDIRECT_TO_URL</b> .
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>

## Request Example

```
{
  "l7policy": {
    "description": "Redirect requests to images.example.com",
    "admin_state_up": true,
    "redirect_http_code": 301,
    "redirect_url": "http://images.example.com",
  }
}
```

```

        "name": "redirect-images.example.com",
        "action": "REDIRECT_TO_URL",
        "position": 1,
        "tags": ["updated_tag"]
    }
}

```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
action	body	string	The L7 policy action. One of <b>REDIRECT_PREFIX</b> , <b>REDIRECT_TO_POOL</b> , <b>REDIRECT_TO_URL</b> , or <b>REJECT</b> .
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
created_at	body	string	The UTC date and timestamp when the resource was created.
description	body	string	A human-readable description for the resource.
id	body	uuid	The ID of the L7 policy.
listener_id	body	uuid	The ID of the listener.
name	body	string	Human-readable name of the resource.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
position	body	integer	The position of this policy on the listener. Positions start at 1.
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
redirect_http_code	body	integer	Requests matching this policy will be redirected to the specified URL or Prefix URL with the HTTP response code. Valid if <b>action</b> is <b>REDIRECT_TO_URL</b> or <b>REDIRECT_PREFIX</b> . Valid options are: 301, 302, 303, 307, or 308. Default is 302. <b>New in version 2.9</b>
redirect_pool_id	body	uuid	Requests matching this policy will be redirected to the pool with this ID. Only valid if <b>action</b> is <b>REDIRECT_TO_POOL</b> . The pool has some restrictions, See <a href="#">Protocol Combinations (Listener/Pool)</a> .
redirect_prefix	body	string	Requests matching this policy will be redirected to this Prefix URL. Only valid if

Name	In	Type	Description
			<b>action</b> is <code>REDIRECT_PREFIX</code> .
redirect_url	body	string	Requests matching this policy will be redirected to this URL. Only valid if <b>action</b> is <code>REDIRECT_TO_URL</code> .
rules	body	array	List of associated L7 rule IDs.
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
updated_at	body	string	The UTC date and timestamp when the resource was last updated.

## Response Example

```
{
  "l7policy": [
    {
      "listener_id": "023f2e34-7806-443b-bfae-16c324569a3d",
      "description": "Redirect requests to example.com",
      "admin_state_up": true,
      "rules": [
        {
          "id": "efd6a3f8-73bf-47f0-8ae6-503ebda57372"
        }
      ],
      "created_at": "2017-06-24T23:25:14",
      "provisioning_status": "PENDING_UPDATE",
      "updated_at": "2017-06-24T23:30:05",
      "redirect_http_code": 301,
      "redirect_pool_id": null,
      "redirect_prefix": null,
      "redirect_url": "http://www.example.com",
      "action": "REDIRECT_TO_URL",
      "position": 1,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "id": "8a1412f0-4c32-4257-8b07-af4770b604fd",
      "operating_status": "ONLINE",
      "name": "redirect-example.com",
      "tags": ["updated_tag"]
    }
  ]
}
```

**DELETE**  
`/v2/lbaas/l7policies/ {l7policy_id}`  
**Remove a L7 Policy**

[detail](#)

Removes a L7 policy and its associated configuration from the project.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
l7policy_id	path	uuid	The ID of the L7 policy to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

## L7 Rules

```
GET  
/v2/lbaas/l7policies/ {l7policy_id} /rules  
List L7 Rules
```

detail

Lists all L7 rules for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list L7 policies for other projects.

The list might be empty.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
l7policy_id	path	uuid	The ID of the L7 policy to query.
project_id (Optional)	query	string	The ID of the project to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/l7p
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
compare_type	body	string	The comparison type for the L7 rule. One of <b>CONTAINS</b> , <b>ENDS_WITH</b> , <b>EQUAL_TO</b> , <b>REGEX</b> , or <b>STARTS_WITH</b> .
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the L7 rule.
invert	body	boolean	When <b>true</b> the logic of the rule is inverted. For example, with invert <b>true</b> , <i>equal to</i> would become <i>not equal to</i> .
key	body	string	The key to use for the comparison. For example, the name of the cookie to evaluate.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.

Name	In	Type	Description
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
type	body	string	The L7 rule type. One of <b>COOKIE</b> , <b>FILE_TYPE</b> , <b>HEADER</b> , <b>HOST_NAME</b> , <b>PATH</b> , <b>SSL_CONN_HAS_CERT</b> , <b>SSL_VERIFY_RESULT</b> , or <b>SSL_DN_FIELD</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
value	body	string	The value to use for the comparison. For example, the file type to compare.

## Response Example

```
{
  "rules": [
    {
      "created_at": "2017-06-27T15:52:27",
      "compare_type": "REGEX",
      "provisioning_status": "ACTIVE",
      "invert": false,
      "admin_state_up": true,
      "updated_at": "2017-06-27T15:52:28",
      "value": "/images*",
      "key": null,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "type": "PATH",
      "id": "16621dbb-a736-4888-a57a-3ecd53df784c",
      "operating_status": "ONLINE",
      "tags": ["test_tag"]
    }
  ]
}
```

POST  
/v2/lbaas/l7policies/ **{l7policy\_id}** /rules  
**Create an L7 Rule**

[detail](#)

Creates a L7 rule.

This operation provisions a new L7 rule by using the configuration that you define in the request object. After the API validates the request and starts the provisioning process, the API returns a response object that contains a unique ID and the status of provisioning the L7 rule.

In the response, the L7 rule [provisioning\\_status](#) is **ACTIVE**, **PENDING\_CREATE**, or **ERROR**.

If the status is **PENDING\_CREATE**, issue GET **/v2/lbaas/l7policies/{l7policy\_id}/rules/{l7rule\_id}** to view the progress of the provisioning operation. When the L7 rule status changes to **ACTIVE**, the L7 rule is successfully provisioned and is ready for further configuration.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

All the rules associated with a given policy are logically ANDed together. A request must match all the policy's rules to match the policy.

If you need to express a logical OR operation between rules, then do this by creating multiple policies with the same action.

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.
<b>503 - Service Unavailable</b>	The service cannot handle the request right now.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
compare_type	body	string	The comparison type for the L7 rule. One of <b>CONTAINS</b> , <b>ENDS_WITH</b> , <b>EQUAL_TO</b> , <b>REGEX</b> , or <b>STARTS_WITH</b> .
invert (Optional)	body	boolean	When <b>true</b> the logic of the rule is inverted. For example, with invert <b>true</b> , <b>equal</b> to would become <i>not equal</i> to. Default is <b>false</b> .
key (Optional)	body	string	The key to use for the comparison. For example, the name of the cookie to evaluate.
l7policy_id	path	uuid	The ID of the L7 policy to query.
project_id (Optional)	body	string	The ID of the project owning this resource.

Name	In	Type	Description
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
type	body	string	The L7 rule type. One of <b>COOKIE</b> , <b>FILE_TYPE</b> , <b>HEADER</b> , <b>HOST_NAME</b> , <b>PATH</b> , <b>SSL_CONN_HAS_CERT</b> , <b>SSL_VERIFY_RESULT</b> , or <b>SSL_DN_FIELD</b> .
value	body	string	The value to use for the comparison. For example, the file type to compare.

## Request Example

```
{
    "rule": {
        "compare_type": "REGEX",
        "invert": false,
        "type": "PATH",
        "value": "/images*",
        "admin_state_up": true,
        "tags": ["test_tag"]
    }
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
compare_type	body	string	The comparison type for the L7 rule. One of <b>CONTAINS</b> , <b>ENDS_WITH</b> , <b>EQUAL_TO</b> , <b>REGEX</b> , or <b>STARTS_WITH</b> .
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the L7 rule.
invert	body	boolean	When <b>true</b> the logic of the rule is inverted. For example, with invert <b>true</b> , <i>equal to</i> would become <i>not equal to</i> .
key	body	string	The key to use for the comparison. For example, the name of the cookie to evaluate.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.

Name	In	Type	Description
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
type	body	string	The L7 rule type. One of <b>COOKIE</b> , <b>FILE_TYPE</b> , <b>HEADER</b> , <b>HOST_NAME</b> , <b>PATH</b> , <b>SSL_CONN_HAS_CERT</b> , <b>SSL_VERIFY_RESULT</b> , or <b>SSL_DN_FIELD</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
value	body	string	The value to use for the comparison. For example, the file type to compare.

## Response Example

```
{
  "rule": [
    {
      "created_at": "2017-06-27T15:52:27",
      "compare_type": "REGEX",
      "provisioning_status": "PENDING_CREATE",
      "invert": false,
      "admin_state_up": true,
      "updated_at": "2017-06-27T15:52:28",
      "value": "/images*",
      "key": null,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "type": "PATH",
      "id": "16621dbb-a736-4888-a57a-3ecd53df784c",
      "operating_status": "OFFLINE",
      "tags": ["test_tag"]
    }
  ]
}
```

**GET**  
**/v2/lbaas/l7policies/ {l7policy\_id} /rules/ {l7rule\_id}**  
**Show L7 Rule details**

detail

Shows the details of a L7 rule.

If you are not an administrative user and the L7 rule object does not belong to your project, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
l7policy_id	path	uuid	The ID of the L7 policy to query.
l7rule_id	path	uuid	The ID of the L7 rule to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/l7p
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
compare_type	body	string	The comparison type for the L7 rule. One of <b>CONTAINS</b> , <b>ENDS_WITH</b> , <b>EQUAL_TO</b> , <b>REGEX</b> , or <b>STARTS_WITH</b> .
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the L7 rule.
invert	body	boolean	When <b>true</b> the logic of the rule is inverted. For example, with invert <b>true</b> , <b>equal to</b> would become <b>not equal to</b> .
key	body	string	The key to use for the comparison. For example, the name of the cookie to evaluate.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .

Name	In	Type	Description
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
type	body	string	The L7 rule type. One of <b>COOKIE</b> , <b>FILE_TYPE</b> , <b>HEADER</b> , <b>HOST_NAME</b> , <b>PATH</b> , <b>SSL_CONN_HAS_CERT</b> , <b>SSL_VERIFY_RESULT</b> , or <b>SSL_DN_FIELD</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
value	body	string	The value to use for the comparison. For example, the file type to compare.

## Response Example

```
{
  "rule": {
    {
      "created_at": "2017-06-27T15:52:27",
      "compare_type": "REGEX",
      "provisioning_status": "ACTIVE",
      "invert": false,
      "admin_state_up": true,
      "updated_at": "2017-06-27T15:52:28",
      "value": "/images*",
      "key": null,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "type": "PATH",
      "id": "16621dbb-a736-4888-a57a-3ecd53df784c",
      "operating_status": "ONLINE",
      "tags": ["test_tag"]
    }
  }
}
```

**PUT**  
**/v2/lbaas/l7policies/ {l7policy\_id} /rules/ {l7rule\_id}**  
**Update a L7 Rule**

[detail](#)

Updates a L7 rule.

If the request is valid, the service returns the **Accepted (202)** response code. To confirm the update, check that the L7 rule provisioning status is **ACTIVE**. If the status is **PENDING\_UPDATE**, use a GET operation to poll the L7 rule object for changes.

This operation returns the updated L7 rule object with the **ACTIVE**, **PENDING\_UPDATE**, or **ERROR** provisioning status.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
admin_state_up (Optional)	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ). Default is <b>true</b> .
compare_type (Optional)	body	string	The comparison type for the L7 rule. One of <b>CONTAINS</b> , <b>ENDS_WITH</b> , <b>EQUAL_TO</b> , <b>REGEX</b> , or <b>STARTS_WITH</b> .
invert (Optional)	body	boolean	When <b>true</b> the logic of the rule is inverted. For example, with invert <b>true</b> , <i>equal to</i> would become <i>not equal to</i> . Default is <b>false</b> .
key (Optional)	body	string	The key to use for the comparison. For example, the name of the cookie to evaluate.
l7policy_id	path	uuid	The ID of the L7 policy to query.
l7rule_id	path	uuid	The ID of the L7 rule to query.
tags (Optional)	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
type (Optional)	body	string	The L7 rule type. One of <b>COOKIE</b> , <b>FILE_TYPE</b> , <b>HEADER</b> , <b>HOST_NAME</b> , <b>PATH</b> , <b>SSL_CONN_HAS_CERT</b> , <b>SSL_VERIFY_RESULT</b> , or <b>SSL_DN_FIELD</b> .
value (Optional)	body	string	The value to use for the comparison. For example, the file type to compare.

## Request Example

```
{
  "rule": {
    "compare_type": "REGEX",
    "invert": true,
    "type": "PATH",
    "value": "/images/special*",
  }
}
```

```

        "admin_state_up": true,
        "tags": ["updated_tag"]
    }
}

```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
admin_state_up	body	boolean	The administrative state of the resource, which is up ( <b>true</b> ) or down ( <b>false</b> ).
compare_type	body	string	The comparison type for the L7 rule. One of <b>CONTAINS</b> , <b>ENDS_WITH</b> , <b>EQUAL_TO</b> , <b>REGEX</b> , or <b>STARTS_WITH</b> .
created_at	body	string	The UTC date and timestamp when the resource was created.
id	body	uuid	The ID of the L7 rule.
invert	body	boolean	When <b>true</b> the logic of the rule is inverted. For example, with invert <b>true</b> , <i>equal to</i> would become <i>not equal to</i> .
key	body	string	The key to use for the comparison. For example, the name of the cookie to evaluate.
operating_status	body	string	The operating status of the resource. See <a href="#">Operating Status Codes</a> .
project_id	body	string	The ID of the project owning this resource.
provisioning_status	body	string	The provisioning status of the resource. See <a href="#">Provisioning Status Codes</a> .
tags	body	array	A list of simple strings assigned to the resource. <b>New in version 2.5</b>
type	body	string	The L7 rule type. One of <b>COOKIE</b> , <b>FILE_TYPE</b> , <b>HEADER</b> , <b>HOST_NAME</b> , <b>PATH</b> , <b>SSL_CONN_HAS_CERT</b> , <b>SSL_VERIFY_RESULT</b> , or <b>SSL_DN_FIELD</b> .
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
value	body	string	The value to use for the comparison. For example, the file type to compare.

## Response Example

```
{
  "rule": {
    "created_at": "2017-06-27T15:52:27",
    "compare_type": "REGEX",
    "provisioning_status": "PENDING_UPDATE",
    "invert": true,
    "admin_state_up": true,
    "updated_at": "2017-06-27T15:58:28",
    "value": "/images/special*",
    "key": null,
    "project_id": "e3cd678b11784734bc366148aa37580e",
    "type": "PATH",
    "id": "16621dbb-a736-4888-a57a-3ecd53df784c",
    "operating_status": "ONLINE",
    "tags": ["updated_tag"]
  }
}
```

**DELETE**  
`/v2/lbaas/l7policies/ {l7policy_id} /rules/ {l7rule_id}`  
**Remove a L7 Rule**

detail

Removes a L7 rule and its associated configuration from the project.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
l7policy_id	path	uuid	The ID of the L7 policy to query.
l7rule_id	path	uuid	The ID of the L7 rule to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

## Quotas

GET  
/v2/lbaas/quotas  
**List Quota**

detail

Lists all quotas for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to list quotas for other projects.

If the quota is listed as **null** the quota is using the deployment default quota settings.

A quota of **-1** means the quota is unlimited.

The list might be empty.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

Name	In	Type	Description
project_id (Optional)	query	string	The ID of the project to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/quc
```

## Response Parameters

Name	In	Type	Description
healthmonitor	body	integer	The configured health monitor quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7policy	body	integer	The configured l7policy quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7rule	body	integer	The configured l7rule quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
listener	body	integer	The configured listener quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
loadbalancer	body	integer	The configured load balancer quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
member	body	integer	The configured member quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
pool	body	integer	The configured pool quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
project_id	body	string	The ID of the project owning this resource.

## Response Example

```
{
  "quotas": [
    {
      "loadbalancer": 5,
      "member": 50,
      "healthmonitor": -1,
      "listener": null,
      "project_id": "e3cd678b11784734bc366148aa37580e",
      "pool": null,
      "l7policy": 3,
      "l7rule": null
    }
  ]
}
```

```
GET  
/v2/lbaas/quotas/defaults  
Show Quota Defaults
```

detail

Show the quota defaults configured for the deployment.

A quota of **-1** means the quota is unlimited.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

There are no request parameters for the show quota defaults API.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/quc
```

## Response Parameters

Name	In	Type	Description
healthmonitor	body	integer	The configured health monitor quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7policy	body	integer	The configured l7policy quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7rule	body	integer	The configured l7rule quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
listener	body	integer	The configured listener quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
loadbalancer	body	integer	The configured load balancer quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.

Name	In	Type	Description
member	body	integer	The configured member quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
pool	body	integer	The configured pool quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.

## Response Example

```
{
  "quota": {
    "loadbalancer": 50,
    "listener": -1,
    "member": -1,
    "pool": -1,
    "healthmonitor": -1,
    "l7policy": -1,
    "l7rule": -1
  }
}
```

GET  
/v2/lbaas/quotas/ {project\_id}  
**Show Project Quota**

detail

Show the quota for the project.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

Administrative users can specify a project ID that is different than their own to show quota for other projects.

A quota of **-1** means the quota is unlimited.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
project_id	path	string	The ID of the project to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/quc
```

## Response Parameters

Name	In	Type	Description
healthmonitor	body	integer	The configured health monitor quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7policy	body	integer	The configured l7policy quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7rule	body	integer	The configured l7rule quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
listener	body	integer	The configured listener quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
loadbalancer	body	integer	The configured load balancer quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
member	body	integer	The configured member quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
pool	body	integer	The configured pool quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.

## Response Example

```
{
  "quota": {
    "loadbalancer": 5,
    "listener": -1,
    "member": 50,
    "pool": -1,
    "healthmonitor": -1,
    "l7policy": 20,
```

```

        "l7rule": -1
    }
}

```

**PUT**  
/v2/lbaas/quotas/ **{project\_id}**  
**Update a Quota**

[detail](#)

Updates a quota for a project.

If the request is valid, the service returns the **Accepted (202)** response code.

This operation returns the updated quota object.

If the quota is specified as **null** the quota will use the deployment default quota settings.

Specifying a quota of **-1** means the quota is unlimited.

Specifying a quota of **0** means the project cannot create any of the resource.

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
healthmonitor (Optional)	body	integer	The configured health monitor quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7policy (Optional)	body	integer	The configured l7policy quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7rule (Optional)	body	integer	The configured l7rule quota limit. A setting of <b>null</b> means it is using the deployment default

Name	In	Type	Description
			quota. A setting of <b>-1</b> means unlimited.
listener	body	integer	The configured listener quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
loadbalancer	body	integer	The configured load balancer quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
member	body	integer	The configured member quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
pool	body	integer	The configured pool quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
project_id	path	string	The ID of the project to query.

## Request Example

```
{
    "quota": {
        "loadbalancer": 10,
        "listener": -1,
        "member": 50,
        "pool": -1,
        "healthmonitor": -1,
        "l7policy": 15,
        "l7rule": 25
    }
}
```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" --
```

## Response Parameters

Name	In	Type	Description
healthmonitor	body	integer	The configured health monitor quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7policy	body	integer	The configured l7policy quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
l7rule	body	integer	The configured l7rule quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
listener	body	integer	The configured listener quota limit. A setting of <b>null</b> means it is using the deployment default

Name	In	Type	Description
			quota. A setting of <b>-1</b> means unlimited.
loadbalancer	body	integer	The configured load balancer quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
member	body	integer	The configured member quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.
pool	body	integer	The configured pool quota limit. A setting of <b>null</b> means it is using the deployment default quota. A setting of <b>-1</b> means unlimited.

## Response Example

```
{
  "quota": {
    "loadbalancer": 10,
    "listener": -1,
    "member": 50,
    "pool": -1,
    "healthmonitor": -1,
    "l7policy": 15,
    "l7rule": 25
  }
}
```

**DELETE**  
/v2/lbaas/quotas/ {project\_id}  
**Reset a Quota**

detail

Resets a project quota to use the deployment default quota.

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
project_id	path	string	The ID of the project to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/
```

## Response

There is no body content for the response of a successful DELETE request.

## Providers

```
GET  
/v2/lbaas/providers  
List Providers
```

detail

Lists all enabled provider drivers.

Use the **fields** query parameter to control which fields are returned in the response body.

The list might be empty.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/prc
```

## Response Parameters

Name	In	Type	Description
name	body	string	Provider name.
description	body	string	Provider description.

## Response Example

```
{
  "providers": [
    {
      "name": "amphora",
      "description": "The Octavia Amphora driver."
    },
    {
      "name": "octavia",
      "description": "Deprecated alias of the Octavia Amphora driver."
    }
  ]
}
```

GET  
/v2/lbaas/providers/ {provider} /flavor\_capabilities  
**Show Provider Flavor Capabilities**

[detail](#)

Shows the provider driver flavor capabilities. These are the features of the provider driver that can be configured in an Octavia flavor. This API returns a list of dictionaries with the name and description of each flavor capability of the provider.

The list might be empty and a provider driver may not implement this feature.

### New in version 2.6

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
provider	path	string	The provider to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/prc
```

## Response Parameters

Name	In	Type	Description
flavor_capabilities	body	object	The provider flavor capabilities dictionary object.
name	body	string	The provider flavor capability name.
description	body	string	The provider flavor capability description.

## Response Example

```
{  
    "flavor_capabilities": [  
        {  
            "name": "loadbalancer_topology",  
            "description": "The load balancer topology. One of: SINGLE - One amphor  
        }  
    ]  
}
```

GET  
/v2/lbaas/providers/ {provider} /availability\_zone\_capabilities  
**Show Provider Availability Zone Capabilities**

detail

Shows the provider driver availability zone capabilities. These are the features of the provider driver that can be configured in an Octavia availability zone. This API returns a list of dictionaries with the name and description of each availability zone capability of the provider.

The list might be empty and a provider driver may not implement this feature.

**New in version 2.14**

Success

Code	Reason
<b>200 - OK</b>	Request was successful.
Error	
Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
provider	path	string	The provider to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/lbaas/prc
```

## Response Parameters

Name	In	Type	Description
availability_zone_capabilities	body	object	The provider availability zone capabilities dictionary object.
name	body	string	The provider availability zone capability name.
description	body	string	The provider availability zone capability description.

## Response Example

```
{
  "availability_zone_capabilities": [
    {
      "name": "compute_zone",
      "description": "The compute availability zone."
    },
    {
      "name": "volume_zone",
      "description": "The volume availability zone."
    }
  ]
}
```

```
        ]  
    }  
}
```

## Flavors

```
GET  
/v2.0/lbaas/flavors  
List Flavors
```

detail

List all available flavors.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

The list might be empty.

**New in version 2.6**

### Success

Code	Reason
<b>200 - OK</b>	Request was successful.

### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

### Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

### Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/f
```

### Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
flavor_profile_id	body	uuid	The ID of the flavor profile.
flavors	body	array	A list of <b>flavor</b> objects.
id	body	uuid	The ID of the flavor.
name	body	string	Human-readable name of the resource.

## Response Example

```
{
  "flavors": [
    {
      "id": "8f94060c-8d5b-4472-9cf8-e8a2b909481d",
      "name": "Basic",
      "description": "A basic standalone Octavia load balancer.",
      "enabled": true,
      "flavor_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"
    }
  ]
}
```

POST  
/v2.0/lbaas/flavors  
**Create Flavor**

detail

Creates a flavor.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

### New in version 2.6

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.

Code	Reason
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
description (Optional)	body	string	A human-readable description for the resource.
enabled (Optional)	body	boolean	If the resource is available for use. The default is True.
flavor	body	object	A flavor object.
flavor_profile_id	body	uuid	The ID of the flavor profile.
name	body	string	Human-readable name of the resource.

## Request Example

```
{
  "flavor": {
    "name": "Basic",
    "description": "A basic standalone Octavia load balancer.",
    "enabled": true,
    "flavor_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"
  }
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
flavor_profile_id	body	uuid	The ID of the flavor profile.
flavor	body	object	A flavor object.
id	body	uuid	The ID of the flavor.
name	body	string	Human-readable name of the resource.

## Response Example

```
{
  "flavor": {
    "id": "8f94060c-8d5b-4472-9cf8-e8a2b909481d",
    "name": "Basic",
    "description": "A basic standalone Octavia load balancer.",
    "enabled": true,
    "flavor_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"
  }
}
```

```
}
```

GET  
/v2.0/lbaas/flavors/{**flavor\_id**}  
**Show Flavor Details**

detail

Shows the details of a flavor.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

This operation does not require a request body.

**New in version 2.6**

Success

Code	Reason
<b>200 - OK</b>	Request was successful.

Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
flavor_id	path	uuid	The ID of the flavor to query.

Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/f
```

◀ ▶

Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
flavor_profile_id	body	uuid	The ID of the flavor profile.
flavor	body	object	A flavor object.
id	body	uuid	The ID of the flavor.
name	body	string	Human-readable name of the resource.

## Response Example

```
{
  "flavor": {
    "id": "8f94060c-8d5b-4472-9cf8-e8a2b909481d",
    "name": "Basic",
    "description": "A basic standalone Octavia load balancer.",
    "enabled": true,
    "flavor_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"
  }
}
```

**PUT**  
/v2.0/lbaas/flavors/ **{flavor\_id}**  
**Update a Flavor**

detail

Update a flavor.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

### New in version 2.6

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
description (Optional)	body	string	A human-readable description for the resource.
enabled (Optional)	body	boolean	If the resource is available for use. The default is True.
flavor	body	object	A flavor object.
flavor_id	path	uuid	The ID of the flavor to query.
name (Optional)	body	string	Human-readable name of the resource.

## Request Example

```
{
  "flavor": {
    "name": "Basic",
    "description": "A basic standalone Octavia load balancer.",
    "enabled": false
  }
}
```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
flavor_profile_id	body	uuid	The ID of the flavor profile.
flavor	body	object	A flavor object.
id	body	uuid	The ID of the flavor.
name	body	string	Human-readable name of the resource.

## Response Example

```
{
  "flavor": {
    "id": "8f94060c-8d5b-4472-9cf8-e8a2b909481d",
    "name": "Basic",
    "description": "A basic standalone Octavia load balancer.",
    "enabled": false,
    "flavor_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"
  }
}
```

**DELETE**  
/v2.0/lbaas/flavors/{flavor\_id}  
**Remove a Flavor**

detail

Remove a flavor and its associated configuration.

If any load balancers are using this flavor the service returns the HTTP **Conflict (409)** response code.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

#### New in version 2.6

#### Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

#### Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

#### Request

Name	In	Type	Description
flavor_id	path	uuid	The ID of the flavor to query.

#### Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/flavors/1
```

#### Response

There is no body content for the response of a successful DELETE request.

## Flavor Profiles

GET

/v2.0/lbaas/flavorprofiles

#### List Flavor Profiles

detail

List all available flavor profiles.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For

information, see [Filtering and column selection](#).

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

The list might be empty.

#### New in version 2.6

### Success

Code	Reason
<b>200 - OK</b>	Request was successful.

### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

### Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

### Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/f
```

### Response Parameters

Name	In	Type	Description
flavor_data	body	string	The JSON string containing the flavor metadata.
flavorprofiles	body	array	A list of <b>flavorprofile</b> objects.
id	body	uuid	The ID of the flavor profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{  
    "flavorprofiles": [  
        {  
            "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",  
            "name": "amphora-act-stdby",  
            "provider_name": "amphora",  
            "flavor_data": "{\"loadbalancer_topology\": \"ACTIVE_STANDBY\"}"  
        }  
    ]  
}
```

POST  
/v2.0/lbaas/flavorprofiles  
**Create Flavor Profile**

detail

Creates a flavor profile.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

### New in version 2.6

#### Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

#### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

#### Request

Name	In	Type	Description
flavor_data	body	string	The JSON string containing the flavor metadata.
flavorprofile	body	object	A <b>flavorprofile</b> object.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Request Example

```
{  
    "flavorprofile":  
    {  
        "name": "amphora-act-stdby",  
        "provider_name": "amphora",  
        "flavor_data": "{\"loadbalancer_topology\": \"ACTIVE_STANDBY\""}  
    }  
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
flavor_data	body	string	The JSON string containing the flavor metadata.
flavorprofile	body	object	A <b>flavorprofile</b> object.
id	body	uuid	The ID of the flavor profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{  
    "flavorprofile":  
    {  
        "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",  
        "name": "amphora-act-stdby",  
        "provider_name": "amphora",  
        "flavor_data": "{\"loadbalancer_topology\": \"ACTIVE_STANDBY\""}  
    }  
}
```

GET

/v2.0/lbaas/flavorprofiles/ {flavorprofile\_id}

Show Flavor Profile Details

detail

Shows the details of a flavor profile.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

**New in version 2.6**

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
flavorprofile_id	path	uuid	The ID of the flavor profile to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/f
```

## Response Parameters

Name	In	Type	Description
flavor_data	body	string	The JSON string containing the flavor metadata.
flavorprofile	body	object	A <b>flavorprofile</b> object.
id	body	uuid	The ID of the flavor profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{  
  "flavorprofile":  
  {  
    "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",  
    "name": "Octavia",  
    "provider_name": "Octavia",  
    "flavor_data": {  
      "cores": 2,  
      "disk_gb": 20,  
      "memory_gb": 1.5,  
      "flavor_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"  
    }  
  }  
}
```

```

        "name": "amphora-act-stdby",
        "provider_name": "amphora",
        "flavor_data": "{\"loadbalancer_topology\": \"ACTIVE_STANDBY\"}"
    }
}

```

**PUT**  
/v2.0/lbaas/flavorprofiles/ {flavorprofile\_id}

### Update a Flavor Profile

detail

Update a flavor profile.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

**New in version 2.6**

Success

Code	Reason
<b>200 - OK</b>	Request was successful.

Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

Request

Name	In	Type	Description
flavor_data (Optional)	body	string	The JSON string containing the flavor metadata.
flavorprofile	body	object	A <b>flavorprofile</b> object.
flavorprofile_id	path	uuid	The ID of the flavor profile to query.
name (Optional)	body	string	Human-readable name of the resource.
provider_name (Optional)	body	string	Provider name.

Request Example

```
{
  "flavorprofile":
  {
    "name": "amphora-standalone",
    "provider_name": "amphora"
  }
}
```

```

        "provider_name": "amphora",
        "flavor_data": "{\"loadbalancer_topology\": \"SINGLE\"}"
    }
}

```

## Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
flavor_data	body	string	The JSON string containing the flavor metadata.
flavorprofile	body	object	A <b>flavorprofile</b> object.
id	body	uuid	The ID of the flavor profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{
  "flavorprofile": {
    {
      "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",
      "name": "amphora-standalone",
      "provider_name": "amphora",
      "flavor_data": "{\"loadbalancer_topology\": \"SINGLE\"}"
    }
  }
}
```

**DELETE**  
`/v2.0/lbaas/flavorprofiles/ {flavorprofile_id}`  
**Remove a Flavor Profile**

[detail](#)

Remove a flavor profile and its associated configuration.

If any flavors using this flavor profile the service returns the HTTP **Conflict (409)** response code.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

### New in version 2.6

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
flavorprofile_id	path	uuid	The ID of the flavor profile to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/availabilityzones/1
```

## Response

There is no body content for the response of a successful DELETE request.

## Availability Zones

GET  
/v2.0/lbaas/availabilityzones  
**List Availability Zones**

detail

List all available availability zones.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

The list might be empty.

### New in version 2.14

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.

Code	Reason
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/e
```

## Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
availability_zone_profile_id	body	uuid	The ID of the availability zone profile.
availability_zones	body	array	A list of <b>availability zone</b> objects.
name	body	string	Human-readable name of the resource.

## Response Example

```
{
  "availability_zones": [
    {
      "name": "my_az",
      "description": "My availability zone.",
      "enabled": true,
      "availability_zone_profile_id": "5712097e-0092-45dc-bff0-ab68b61e"
    }
  ]
}
```

POST  
/v2.0/lbaas/availabilityzones  
**Create Availability Zone**

detail

Creates an availability zone.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request** (400) response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

If you are not an administrative user the service returns the HTTP **Forbidden** (403) response code.

#### New in version 2.14

### Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

### Request

Name	In	Type	Description
description (Optional)	body	string	A human-readable description for the resource.
enabled (Optional)	body	boolean	If the resource is available for use. The default is True.
availability_zone	body	object	An availability zone object.
availability_zone_profile_id	body	uuid	The ID of the availability zone profile.
name	body	string	Human-readable name of the resource.

### Request Example

```
{  
    "availability_zone": {  
        "name": "my_az",  
        "description": "My availability zone.",  
        "enabled": true,  
        "availability_zone_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51e"  
    }  
}
```

### Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
availability_zone_profile_id	body	uuid	The ID of the availability zone profile.
availability_zone	body	object	An availability zone object.
name	body	string	Human-readable name of the resource.

## Response Example

```
{  
    "availability_zone": {  
        "name": "my_az",  
        "description": "My availability zone.",  
        "enabled": true,  
        "availability_zone_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"  
    }  
}
```

GET  
`/v2.0/lbaas/availabilityzones/ {availability_zone_name}`  
**Show Availability Zone Details**

detail

Shows the details of an availability zone.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

This operation does not require a request body.

### New in version 2.14

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>404 - Not Found</b>	The requested resource could not be found.

Code	Reason
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
availability_zone_name	path	string	The name of the availability zone to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/e
```

## Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
availability_zone_profile_id	body	uuid	The ID of the availability zone profile.
availability_zone	body	object	An availability zone object.
name	body	string	Human-readable name of the resource.

## Response Example

```
{
  "availability_zone": {
    "name": "my_az",
    "description": "My availability zone.",
    "enabled": true,
    "availability_zone_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51a"
  }
}
```

PUT  
/v2.0/lbaas/availabilityzones/ **{availability\_zone\_name}**  
**Update an Availability Zone**

detail

Update an availability zone.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

**New in version 2.14**

Success

Code	Reason
<b>200 - OK</b>	Request was successful.

Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

Request

Name	In	Type	Description
description (Optional)	body	string	A human-readable description for the resource.
enabled (Optional)	body	boolean	If the resource is available for use. The default is True.
availability_zone	body	object	An availability zone object.
availability_zone_name	path	string	The name of the availability zone to query.

Request Example

```
{  
    "availability_zone": {  
        "description": "My availability zone.",  
        "enabled": false  
    }  
}
```

Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

Response Parameters

Name	In	Type	Description
description	body	string	A human-readable description for the resource.
enabled	body	boolean	If the resource is available for use.
availability_zone_profile_id	body	uuid	The ID of the availability zone profile.
availability_zone	body	object	An availability zone object.
name	body	string	Human-readable name of the resource.

## Response Example

```
{
  "availability_zone": {
    "name": "my_az",
    "description": "My availability zone.",
    "enabled": false,
    "availability_zone_profile_id": "5712097e-0092-45dc-bff0-ab68b61ad51e"
  }
}
```

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**DELETE**  
/v2.0/lbaas/availabilityzones/ **{availability\_zone\_name}**  
**Remove an Availability Zone**

[detail](#)

Remove an availability zone and its associated configuration.

If any load balancers are using this availability zone the service returns the HTTP **Conflict (409)** response code.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

### New in version 2.14

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
availability_zone_name	path	string	The name of the availability zone to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/availabilityzoneprofiles/1
```

## Response

There is no body content for the response of a successful DELETE request.

## Availability Zone Profiles

GET  
/v2.0/lbaas/availabilityzoneprofiles  
**List Availability Zone Profiles**

detail

List all available Availability Zone Profiles.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

The list might be empty.

### New in version 2.14

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API

Name	In	Type	Description
			returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/e
```

## Response Parameters

Name	In	Type	Description
availability_zone_data	body	string	The JSON string containing the availability zone metadata.
availability_zone_profiles	body	array	A list of <b>availability zone profile</b> objects.
id	body	uuid	The ID of the availability zone profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{
  "availability_zone_profiles": [
    {
      "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",
      "name": "some_az",
      "provider_name": "amphora",
      "availability_zone_data": "{\"compute_zone\": \"az1\", \"volume_z"
    }
  ]
}
```

POST  
/v2.0/lbaas/availabilityzoneprofiles  
**Create Availability Zone Profile**

[detail](#)

Creates a Availability Zone Profile.

If the API cannot fulfill the request due to insufficient data or data that is not valid, the service returns the HTTP **Bad Request (400)** response code with information about the failure in the response body. Validation errors require that you correct the error and submit the request again.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

**New in version 2.14**

## Success

Code	Reason
<b>201 - Created</b>	Request has been fulfilled and new resource created.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
availability_zone_data	body	string	The JSON string containing the availability zone metadata.
availability_zone_profile	body	object	An <b>availability zone profile</b> object.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Request Example

```
{  
    "availability_zone_profile":  
    {  
        "name": "some_az",  
        "provider_name": "amphora",  
        "availability_zone_data": "{\"compute_zone\": \"az1\", \"volume_z  
    }  
}
```

## Curl Example

```
curl -X POST -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -
```

## Response Parameters

Name	In	Type	Description
availability_zone_data	body	string	The JSON string containing the availability zone metadata.
availability_zone_profile	body	object	An <b>availability zone profile</b> object.

Name	In	Type	Description
id	body	uuid	The ID of the availability zone profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{
  "availability_zone_profile": [
    {
      "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",
      "name": "some_az",
      "provider_name": "amphora",
      "availability_zone_data": "{\"compute_zone\": \"az1\", \"volume_"
    }
  ]
}
```

GET  
/v2.0/lbaas/availabilityzoneprofiles/{availability\_zone\_profile\_id}  
**Show Availability Zone Profile Details**

detail

Shows the details of a Availability Zone Profile.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

### New in version 2.14

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
availability_zone_profile_id	path	uuid	The ID of the availability zone profile to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbaas/e
```

## Response Parameters

Name	In	Type	Description
availability_zone_data	body	string	The JSON string containing the availability zone metadata.
availability_zone_profile	body	object	An <b>availability zone profile</b> object.
id	body	uuid	The ID of the availability zone profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{
  "availability_zone_profile": {
    "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",
    "name": "some_az",
    "provider_name": "amphora",
    "availability_zone_data": "{\"compute_zone\": \"az1\", \"volume_z"
  }
}
```

PUT  
/v2.0/lbaas/availabilityzoneprofiles/ {availability\_zone\_profile\_id}  
**Update a Availability Zone Profile**

detail

Update a Availability Zone Profile.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

#### New in version 2.14

### Success

Code	Reason
<b>200 - OK</b>	Request was successful.

### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

### Request

Name	In	Type	Description
availability_zone_data (Optional)	body	string	The JSON string containing the availability zone metadata.
availability_zone_profile	body	object	An <b>availability zone profile</b> object.
availability_zone_profile_id	path	uuid	The ID of the availability zone profile to query.
name (Optional)	body	string	Human-readable name of the resource.
provider_name (Optional)	body	string	Provider name.

### Request Example

```
{  
    "availability_zone_profile":  
    {  
        "name": "other_az",  
        "provider_name": "amphora",  
        "availability_zone_data": "{\"compute_zone\": \"az2\", \"volume_2":  
    }  
}
```

### Curl Example

```
curl -X PUT -H "Content-Type: application/json" -H "X-Auth-Token: <token>" -c
```

## Response Parameters

Name	In	Type	Description
availability_zone_data	body	string	The JSON string containing the availability zone metadata.
availability_zone_profile	body	object	An <b>availability zone profile</b> object.
id	body	uuid	The ID of the availability zone profile.
name	body	string	Human-readable name of the resource.
provider_name	body	string	Provider name.

## Response Example

```
{
  "availability_zone_profile": [
    {
      "id": "5712097e-0092-45dc-bff0-ab68b61ad51a",
      "name": "other_az",
      "provider_name": "amphora",
      "availability_zone_data": "{\"compute_zone\": \"az2\", \"volume_"
    }
  ]
}
```

◀ ▶

**DELETE**  
/v2.0/lbaas/availabilityzoneprofiles/{availability\_zone\_profile\_id}  
**Remove a Availability Zone Profile**

[detail](#)

Remove a Availability Zone Profile and its associated configuration.

If any availability zone is using this Availability Zone Profile the service returns the HTTP **Conflict (409)** response code.

If you are not an administrative user the service returns the HTTP **Forbidden (403)** response code.

### New in version 2.14

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.

Code	Reason
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
availability_zone_profile_id	path	uuid	The ID of the availability zone profile to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2.0/lbae
```

## Response

There is no body content for the response of a successful DELETE request.

## Amphorae

GET  
/v2/octavia/amphorae  
**List Amphora**

detail

Lists all amphora for the project.

If you are not an administrative user, the service returns the HTTP **Forbidden (403)** response code.

Use the **fields** query parameter to control which fields are returned in the response body. Additionally, you can filter results by using query string parameters. For information, see [Filtering and column selection](#).

The list might be empty.

### Note

The field *cached\_zone* should be used for quick filtering and reference only, as it may be out of date. If an up-to-date zone is vital, we recommend retrieving details directly from the compute service.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.

Code	Reason
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/octavia/e
```

## Response Parameters

Name	In	Type	Description
id	body	uuid	The associated amphora ID.
loadbalancer_id	body	uuid	The ID of the load balancer.
compute_id	body	uuid	The ID of the amphora resource in the compute system.
lb_network_ip	body	string	The management IP of the amphora.
vrrp_ip	body	string	The address of the vrrp port on the amphora.
ha_ip	body	string	The IP address of the Virtual IP (VIP).
vrrp_port_id	body	uuid	The vrrp port's ID in the networking system.
ha_port_id	body	uuid	The ID of the Virtual IP (VIP) port.
cert_expiration	body	string	The date the certificate for the amphora expires.
cert_busy	body	string	Whether the certificate is in the process of being replaced.
role	body	string	The role of the amphora. One of <b>STANDALONE</b> , <b>MASTER</b> , <b>BACKUP</b> .
status	body	string	The status of the amphora. One of: <b>BOOTING</b> , <b>ALLOCATED</b> , <b>READY</b> , <b>PENDING_CREATE</b> , <b>PENDING_DELETE</b> , <b>DELETED</b> , <b>ERROR</b> .
vrrp_interface	body	string	The bound interface name of the vrrp port on the amphora.
vrrp_id	body	string	The vrrp group's ID for the amphora.

Name	In	Type	Description
vrrp_priority	body	string	The priority of the amphora in the vrrp group.
cached_zone	body	string	The availability zone of a compute instance, cached at create time. This is not guaranteed to be current. May be an empty-string if the compute service does not use zones.
created_at	body	string	The UTC date and timestamp when the resource was created.
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
image_id	body	uuid	The ID of the glance image used for the amphora. <b>New in version 2.1</b>
compute_flavor	body	string	The ID of the compute flavor used for the amphora. <b>New in version 2.3</b>

## Response Example

```
{
  "amphorae": [
    {
      "id": "6bd55cd3-802e-447e-a518-1e74e23bb106",
      "load_balancer_id": "09eedfc6-2c55-41a8-a75c-2cd4e95212ca",
      "compute_id": "f0f79f90-733d-417a-8d70-cc6be62cd54d",
      "lb_network_ip": "192.168.1.2",
      "vrrp_ip": "192.168.1.5",
      "ha_ip": "192.168.1.10",
      "vrrp_port_id": "ab2a8add-76a9-44bb-89f8-88430193cc83",
      "ha_port_id": "19561fd3-5da5-46cc-bdd3-99bbdf7246e6",
      "cert_expiration": "2019-09-19 00:34:51",
      "cert_busy": 0,
      "role": "MASTER",
      "status": "ALLOCATED",
      "vrrp_interface": "eth1",
      "vrrp_id": 1,
      "vrrp_priority": 100,
      "cached_zone": "zone1",
      "created_at": "2017-05-10T18:14:44",
      "updated_at": "2017-05-10T23:08:12",
      "image_id": "c1c2ad6f-1c1e-4744-8d1a-d0ef36289e74",
      "compute_flavor": "5446a14a-abec-4455-bc0e-a34e5ff001a3"
    },
    {
      "id": "89c186a3-cb16-497b-b099-c4bd40316642",
      "load_balancer_id": "09eedfc6-2c55-41a8-a75c-2cd4e95212ca",
      "compute_id": "24b1cb54-122d-4960-9035-083642f5c2bb",
      "lb_network_ip": "192.168.1.3",
      "vrrp_ip": "192.168.1.6",
      "ha_ip": "192.168.1.10",
      "vrrp_port_id": "cae421f6-dcf0-4866-9438-d0c682645799",
      "ha_port_id": "19561fd3-5da5-46cc-bdd3-99bbdf7246e6",
      "cert_expiration": "2019-09-19 00:34:51",
      "cert_busy": 0,
      "role": "BACKUP",
      "status": "ALLOCATED",
      "vrrp_interface": "eth1",
      "vrrp_id": 1,
      "vrrp_priority": 200,
      "cached_zone": "zone2",
      "created_at": "2017-06-11T19:15:45",
      "updated_at": "2017-06-11T24:09:13",
      "image_id": "1014292d-cbaa-4ad6-b38b-2e138389f87f",
      "compute_flavor": "5446a14a-abec-4455-bc0e-a34e5ff001a3"
    }
  ]
}
```

```
        ]  
    }
```

GET  
[/v2/octavia/amphorae/ {amphora\\_id}](#)  
**Show Amphora details**

detail

Shows the details of an amphora.

If you are not an administrative user, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

 **Note**

The field *cached\_zone* should be used for quick filtering and reference only, as it may be out of date. If an up-to-date zone is vital, we recommend retrieving details directly from the compute service.

## Success

Code	Reason
<b>200 - OK</b>	Request was successful.

## Error

Code	Reason
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.
amphora_id	path	uuid	The ID of the amphora to query.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/octavia/
```

## Response Parameters

Name	In	Type	Description
id	body	uuid	The associated amphora ID.
loadbalancer_id	body	uuid	The ID of the load balancer.
compute_id	body	uuid	The ID of the amphora resource in the compute system.
lb_network_ip	body	string	The management IP of the amphora.
vrrp_ip	body	string	The address of the vrrp port on the amphora.
ha_ip	body	string	The IP address of the Virtual IP (VIP).
vrrp_port_id	body	uuid	The vrrp port's ID in the networking system.
ha_port_id	body	uuid	The ID of the Virtual IP (VIP) port.
cert_expiration	body	string	The date the certificate for the amphora expires.
cert_busy	body	string	Whether the certificate is in the process of being replaced.
role	body	string	The role of the amphora. One of <b>STANDALONE</b> , <b>MASTER</b> , <b>BACKUP</b> .
status	body	string	The status of the amphora. One of: <b>BOOTING</b> , <b>ALLOCATED</b> , <b>READY</b> , <b>PENDING_CREATE</b> , <b>PENDING_DELETE</b> , <b>DELETED</b> , <b>ERROR</b> .
vrrp_interface	body	string	The bound interface name of the vrrp port on the amphora.
vrrp_id	body	string	The vrrp group's ID for the amphora.
vrrp_priority	body	string	The priority of the amphora in the vrrp group.
cached_zone	body	string	The availability zone of a compute instance, cached at create time. This is not guaranteed to be current. May be an empty-string if the compute service does not use zones.
created_at	body	string	The UTC date and timestamp when the resource was created.
updated_at	body	string	The UTC date and timestamp when the resource was last updated.
image_id	body	uuid	The ID of the glance image used for the amphora. <b>New in version 2.1</b>
compute_flavor	body	string	The ID of the compute flavor used for the amphora. <b>New in version 2.3</b>

## Response Example

```
{  
    "amphora": {  
        "id": "6bd55cd3-802e-447e-a518-1e74e23bb106",  
        "load_balancer_id": "09eedfc6-2c55-41a8-a75c-2cd4e95212ca",  
        "compute_id": "f0f79f90-733d-417a-8d70-cc6be62cd54d",  
        "lb_network_ip": "192.168.1.2",  
        "vrrp_ip": "192.168.1.5",  
        "ha_ip": "192.168.1.10",  
        "vrrp_port_id": "ab2a8add-76a9-44bb-89f8-88430193cc83",  
        "ha_port_id": "19561fd3-5da5-46cc-bdd3-99bbdf7246e6",  
        "cert_expiration": "2019-09-19 00:34:51",  
        "cert_busy": 0,  
        "role": "MASTER",  
        "status": "ALLOCATED",  
        "vrrp_interface": "eth1",  
        "vrrp_id": 1,  
        "vrrp_priority": 100,  
        "cached_zone": "zone1",  
        "created_at": "2017-05-10T18:14:44",  
        "updated_at": "2017-05-10T23:08:12",  
        "image_id": "c1c2ad6f-1c1e-4744-8d1a-d0ef36289e74",  
        "compute_flavor": "5446a14a-abec-4455-bc0e-a34e5ff001a3"  
    }  
}
```

GET  
`/v2/octavia/amphorae/ {amphora_id} /stats`  
**Show Amphora Statistics**

detail

Show the statistics for an amphora.

If you are not an administrative user, the service returns the HTTP **Forbidden (403)** response code.

Use the **fields** query parameter to control which fields are returned in the response body.

**New in version 2.3**

Success

Code	Reason
<b>200 - OK</b>	Request was successful.

Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

Request

Name	In	Type	Description
amphora_id	path	uuid	The ID of the amphora to query.
fields (Optional)	query	string	The fields that you want the server to return. If no <b>fields</b> query parameter is specified, the octavia API returns all attributes allowed by the policy settings. By using the <b>fields</b> parameter, the API returns only the requested set of attributes. The <b>fields</b> parameter can be specified multiple times. For example, if you specify <b>fields=id&amp;fields=name</b> in the request URL, only the <b>id</b> and <b>name</b> attributes will be returned.

## Curl Example

```
curl -X GET -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/octavia/
```

## Response Parameters

Name	In	Type	Description
active_connections	body	integer	The currently active connections.
amphora_stats	body	array	A list of amphora statistics objects, one per listener. <b>New in version 2.3</b>
bytes_in	body	integer	The total bytes received.
bytes_out	body	integer	The total bytes sent.
id	body	uuid	The associated amphora ID.
listener_id	body	uuid	The ID of the listener.
loadbalancer_id	body	uuid	The ID of the load balancer.
request_errors	body	integer	The total requests that were unable to be fulfilled.
total_connections	body	integer	The total connections handled.

## Response Example

```
{
  "amphora_stats": [
    {
      "active_connections": 48629,
      "bytes_in": 65671420,
      "bytes_out": 774771186,
      "id": "63d8349e-c4d7-4156-bc94-29260607b04f",
      "listener_id": "bbe44114-cda2-4fe0-b192-d9e24ce661db",
      "loadbalancer_id": "65b5a7c3-1437-4909-84cf-cec9f7e371ea",
      "request_errors": 0,
      "total_connections": 26189172
    },
    {
      "active_connections": 0,
      "bytes_in": 5,
      "bytes_out": 100,
      "id": "63d8349e-c4d7-4156-bc94-29260607b04f",
      "listener_id": "af45a658-4eeb-4ce9-8b7e-16b0e5676f87",
      "loadbalancer_id": "65b5a7c3-1437-4909-84cf-cec9f7e371ea"
    }
  ]
}
```

```

        "loadbalancer_id": "65b5a7c3-1437-4909-84cf-cec9f7e371ea",
        "request_errors": 0,
        "total_connections": 1
    }
]
}

```

**PUT**  
/v2/octavia/amphorae/ {amphora\_id} /config  
**Configure Amphora**

detail

Update the amphora agent configuration. This will push the new configuration to the amphora agent and will update the configuration options that are mutable.

If you are not an administrative user, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

**New in version 2.7**

## Success

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

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
amphora_id	path	uuid	The ID of the amphora to query.

## Curl Example

```
curl -X PUT -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/octavia/e
```

◀ ▶

## Response

There is no body content for the response of a successful PUT request.

**PUT**  
/v2/octavia/amphorae/ {amphora\_id} /failover

## Failover Amphora

[detail](#)

Force an amphora to failover.

If you are not an administrative user, the service returns the HTTP **Forbidden (403)** response code.

This operation does not require a request body.

### Success

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

### Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

### Request

Name	In	Type	Description
amphora_id	path	uuid	The ID of the amphora to query.

### Curl Example

```
curl -X PUT -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/octavia/
```

### Response

There is no body content for the response of a successful PUT request.

**DELETE**  
**/v2/octavia/amphorae/ {amphora\_id}**  
**Remove an Amphora**

[detail](#)

Removes an amphora and its associated configuration.

The API immediately purges any and all configuration data, depending on the configuration settings. You cannot recover it.

**New in version 2.20**

## Success

Code	Reason
<b>204 - No Content</b>	Request fulfilled but service does not return anything.

## Error

Code	Reason
<b>400 - Bad Request</b>	Some content in the request was invalid.
<b>401 - Unauthorized</b>	Access is denied due to invalid credentials.
<b>403 - Forbidden</b>	Policy does not allow current user to do this operation.
<b>404 - Not Found</b>	The requested resource could not be found.
<b>409 - Conflict</b>	This resource has an action in progress that would conflict with this request.
<b>500 - Internal Server Error</b>	Something went wrong with the service which prevents it from fulfilling the request.

## Request

Name	In	Type	Description
amphora_id	path	uuid	The ID of the amphora to query.

## Curl Example

```
curl -X DELETE -H "X-Auth-Token: <token>" http://198.51.100.10:9876/v2/octavi
```

## Response

There is no body content for the response of a successful DELETE request.



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