



Cisco Nexus 1000V OpenStack API Functions

This chapter provides information about the Cisco Nexus 1000V OpenStack application programming interface (API) functions. The Cisco Nexus 1000V resource name is generic across all hypervisors. The functions that support write (create, update, and delete) operations are explicitly marked as writeable. All others are read-only functions.

The chapter contains the following topics:

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Get the List of Policy Profiles

Name

cisco-policy-profile-list

Description

Retrieves the list of policy profiles from a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

GET /v2.0/policy_profiles.json

User Agent

python-neutronclient

Response Sample

```
{
  "date": "Fri, 13 Sep 2013 00:29:06 GMT",
  "status": "200",
  "content-length": "84",
  "content-type": "application/json; charset=UTF-8",
  "content-location": "http://172.23.180.45:9696/v2.0/policy_profiles.json"
}
{
  "policy_profiles": [
    {
      "id": "452788f5-109d-4963-9153-1c5b181c8a0d",
      "name": "pp1"
    }
  ]
}
```

Response Description

Property	Writeable or Readable
content-location	Readable
id	Readable
name	Readable

Get Information About a Policy Profile

Name

cisco-policy-profile-show

Description

Retrieves information about a policy profile from a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

GET /v2.0/policy_profiles/452788f5-109d-4963-9153-1c5b181c8a0d.json

**Note**

Retrieve the policy profile ID as shown in [Get the List of Policy Profiles, on page 1](#), specifying the profile name in the command line. For example: `GET /v2.0/policy_profiles.json?fields=id&name=pp1`.

User Agent

python-neutronclient

Response Sample

```
{
  "date": "Fri, 13 Sep 2013 00:33:32 GMT",
  "status": "200",
  "content-length": "81",
  "content-type": "application/json; charset=UTF-8",
  "content-location":
"http://172.23.180.45:9696/v2.0/policy_profiles/452788f5-109d-4963-9153-1c5b181c8a0d.json"
}
{
  "policy_profile": {
    "id": "452788f5-109d-4963-9153-1c5b181c8a0d",
    "name": "pp1"
  }
}
```

Response Description

Property	Writeable or Readable
content-location	Readable
id	Readable
name	Readable

Create a Network Profile

Name

cisco-network-profile-create

Description

Creates a network profile on a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

POST /v2.0/network_profiles.json

User Agent

python-neutronclient

Response Sample

```
{
  "network_profile": {
    "segment_range": "100-200",
    "segment_type": "vlan",
    "physical_network": "physnet1",
    "name": "VlanNetProf"
  }
}
{
  "date": "Fri, 13 Sep 2013 00:57:15 GMT",
  "status": "201",
  "content-length": "220",
  "content-type": "application/json; charset=UTF-8"
}
{
  "network_profile": {
    "segment_range": "100-200",
    "segment_type": "vlan",
    "name": "VlanNetProf",
    "sub_type": null,
    "physical_network": "physnet1",
    "id": "58f722ca-489c-4abf-b74f-7bcc2e988d89",
    "multicast_ip_range": null
  }
}
```

Response Description

Property	Writeable or Readable
segment_range	Writeable
segment_type	Writeable
name	Writeable
sub_type	Writeable
physical_network	Writeable
id	Readable
multicast_ip_range	Writeable

Get a List of Network Profiles

Name

cisco-network-profile-list

Description

Retrieves a list of network profiles from a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

GET /v2.0/network_profiles.json

User Agent

python-neutronclient

Response Sample

```
{
  "date": "Fri, 13 Sep 2013 00:59:07 GMT",
  "status": "200",
  "content-length": "223",
  "content-type": "application/json; charset=UTF-8",
  "content-location": "http://172.23.180.45:9696/v2.0/network_profiles.json"
}
{
  "network_profiles": [
    {
      "segment_range": "100-200",
      "segment_type": "vlan",
      "name": "VlanNetProf",
      "sub_type": null,
      "physical_network": "physnet1",
      "id": "58f722ca-489c-4abf-b74f-7bcc2e988d89",
      "multicast_ip_range": null
    }
  ]
}
```

Response Description

Property	Writeable or Readable
content-location	Readable
segment_range	Readable
segment_type	Readable
name	Readable
sub_type	Readable
physical_network	Readable
id	Readable
multicast_ip_range	Readable

Get Information About a Network Profile

Name

cisco-network-profile-show

Description

Gets information about a network profile on a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

GET /v2.0/network_profiles/58f722ca-489c-4abf-b74f-7bcc2e988d89.json

**Note**

Retrieve the network profile ID as shown in [Get a List of Network Profiles, on page 5](#), specifying the profile name in the command line. For example: GET

```
/v2.0/network_profiles.json?fields=id&name=VlanNetProf.
```

User Agent

python-neutronclient

Response Sample

```
{
  "date": "Fri, 13 Sep 2013 01:00:03 GMT",
  "status": "200",
  "content-length": "220",
  "content-type": "application/json; charset=UTF-8",
  "content-location":
"http://172.23.180.45:9696/v2.0/network_profiles/58f722ca-489c-4abf-b74f-7bcc2e988d89.json"
}
{
  "network_profile": {
    "segment_range": "100-200",
    "segment_type": "vlan",
    "name": "VlanNetProf",
    "sub_type": null,
    "physical_network": "physnet1",
    "id": "58f722ca-489c-4abf-b74f-7bcc2e988d89",
    "multicast_ip_range": null
  }
}
```

Response Description

Property	Writeable or Readable
content-location	Readable
segment_range	Readable
segment_type	Readable
name	Readable

Property	Writeable or Readable
sub_type	Readable
physical_network	Readable
id	Readable
multicast_ip_range	Readable

Update a Network Profile

Name

cisco-network-profile-update

Description

Updates a network profile on a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

PUT /v2.0/network_profiles/27d1d0a0-f4fa-462a-977f-4a92cd206616.json



Note

Retrieve the network profile ID as shown in [Get a List of Network Profiles](#), on page 5, specifying the profile name in the command line. For example: GET

```
/v2.0/network_profiles.json?fields=id&name=vmnp2.
```

User Agent

python-neutronclient

Response Sample

```
{
  "network_profile": {
    "name": "vmnp2"
  }
}
```



```

}
}
{
  "date": " Mon, 28 Oct 2013 14:56:29 GMT",
  "status": "200",
  "content-length": "208",
  "content-type": "application/json; charset=UTF-8"
}
{
  "network_profile": {
    "segment_range": "700-705",
    "segment_type": "vlan",
    "name": "VlanNetProf",
    "sub_type": null,
    "physical_network": "p1",
    "id": "58f722ca-489c-4abf-b74f-7bcc2e988d89",
    "multicast_ip_range": null
  }
}

```

Response Description

Property	Writeable or Readable
segment_range	Writeable
segment_type	Readable
name	Writeable
sub_type	Readable
physical_network	Readable
id	Readable
multicast_ip_range	Writeable

Delete a Network Profile

Name

cisco-network-profile-delete

Description

Deletes a network profile from a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

DELETE /v2.0/network_profiles/58f722ca-489c-4abf-b74f-7bcc2e988d89.json

**Note**

Retrieve the network profile ID as shown in [Get a List of Network Profiles](#), on page 5, specifying the profile name in the command line. For example: `GET /v2.0/network_profiles.json?fields=id&name=VlanNetProf.`

User Agent

python-neutronclient

Response Sample

```
{
  "date": "Fri, 13 Sep 2013 01:02:01 GMT",
  "status": "204",
  "content-length": "0"
}
```

Response Description

Property	Writeable or Readable
content-length	Writeable

Create a Network

Name

net-create

Description

Creates a network on a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

POST /v2.0/networks.json

User Agent

python-neutronclient

Response Sample

```
{
  "network": {
    "nlkv:profile_id": "89b77e10-d363-4ee7-81b8-3e3e9ced5b08",
    "name": "VlanNet1",
    "admin_state_up": true
  }
}
{
  "date": "Fri, 13 Sep 2013 01:05:57 GMT",
  "status": "201",
  "content-length": "396",
  "content-type": "application/json; charset=UTF-8"
}
{
  "network": {
    "status": "ACTIVE",
    "subnets": [],
    "name": "VlanNet1",
    "provider:physical_network": "physnet1",
    "admin_state_up": true,
    "tenant_id": "4e56ea94b54442bab13dafcec9f52ebe",
    "provider:network_type": "vlan",
    "router:external": false,
    "nlkv:profile_id": "89b77e10-d363-4ee7-81b8-3e3e9ced5b08",
    "shared": false,
    "id": "036a0a93-d7ef-4920-8ea1-bfe813aa21f4",
    "provider:segmentation_id": 100
  }
}
```

Response Description

Property	Writeable or Readable
status	Writeable
subnets	Writeable
name	Writeable
provider:physical_network	Writeable
admin_state_up	Writeable
tenant_id	Writeable
provider:network_type	Writeable

Property	Writeable or Readable
router:external	Writeable
n1kv:profile_id	Writeable
shared	Writeable
id	Readable
provider:segmentation_id	Writeable

Create a Port

Name

port-create

Description

Creates a port on a Cisco Nexus 1000V switch.

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

GET /v2.0/networks.json?fields=id&name=VlanNet1

User Agent

python-neutronclient

Response Sample

```
{
  "date": "Fri, 13 Sep 2013 01:10:14 GMT",
  "status": "200",
  "content-length": "62",
  "content-type": "application/json; charset=UTF-8",
  "content-location": "http://172.23.180.45:9696/v2.0/networks.json?fields=id&name=VlanNet1"
}
{
  "networks": [
```

```

    {
      "id": "036a0a93-d7ef-4920-8ea1-bfe813aa21f4"
    }
  ]
}

```

Response Description

Property	Writeable or Readable
content-location	Writeable
id	Writeable

Type

Request

Response Format

JSON

Accept Header

application/json

Verb and URI

POST /v2.0/ports.json

User Agent

python-neutronclient

Response Sample

```

{
  "port": {
    "network_id": "036a0a93-d7ef-4920-8ea1-bfe813aa21f4",
    "nlkv:profile_id": "452788f5-109d-4963-9153-1c5b181c8a0d",
    "admin_state_up": true
  }
}
{
  "date": "Fri, 13 Sep 2013 01:10:14 GMT",
  "status": "201",
  "content-length": "472",
  "content-type": "application/json; charset=UTF-8"
}
{
  "port": {
    "status": "ACTIVE",
    "name": "",
    "admin_state_up": true,
    "network_id": "036a0a93-d7ef-4920-8ea1-bfe813aa21f4",
    "tenant_id": "4e56ea94b54442bab13dafcec9f52e8e",
    "binding:vif_type": "ovs",
    "device_owner": "",
    "nlkv:profile_id": "452788f5-109d-4963-9153-1c5b181c8a0d",
    "mac_address": "fa:16:3e:0a:b8:ca",
    "fixed_ips": [

```

```

    {
      "subnet_id": "9244aacc-8d0c-4fbd-8811-6f023cf8288a",
      "ip_address": "10.10.10.3"
    }
  ],
  "id": "e94ad622-eda7-4030-83dd-303bff7a557a",
  "device_id": ""
}
}

```

Response Description

Property	Writeable or Readable
name	Writeable
admin_state_up	Writeable
network_id	Writeable
tenant_id	Writeable
binding:vif_type	Writeable
device_owner	Writeable
n1kv:profile_id	Writeable
mac_address	Writeable
subnet_id	Writeable
ip_address	Writeable
id	Readable
device_id	Writeable