Cisco Container Platform 6.0.0 API Guide

First Published: March 10, 2020

Revised: April 20, 2020

Cisco Systems, Inc.
www.cisco.com

Cisco has more than 200 offices worldwide.
Addresses, phone numbers, and fax numbers
are listed on the Cisco website at
www.cisco.com/go/offices.

Abstract
The Cisco Container Platform 6.0.0 API Guide gives information on Cisco Container Platform APIs and development features.

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON INFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Cisco Container Platform 6.0.0 API Guide
© 2019 Cisco Systems, Inc. All rights reserved.

1 Overview 4

2 Accessing Cisco Container Platform API 4

3 Key Concepts 4

3.1 Provider Client Configuration 4

3.2 Cluster 5

3.3 User Management and Authorization 5

3.3.1 LDAP and Local Users 5

3.4 Subnets and Virtual IP Address Pools 5

4 Examples of API Use Cases for vSphere v2 Clusters 5

4.1 Creating vSphere Tenant Clusters 5

4.2 Deleting vSphere Tenant Clusters 13

4.3 Configuring Windows AD Service Account for Authentication 14

4.4 Managing Windows AD Group Authorizations for Tenant Clusters 17

4.5 Downloading Tenant Cluster KUBECONFIG Environment File 21

4.6 Obtaining TC Master and Ingress VIPs 23

5 Examples of API Use Cases for AWS EKS Clusters 23

5.1 Logging in to Cisco Container Platform 23

5.2 Creating Providers for EKS 24

5.3 Retrieving List of Providers for EKS 24

5.4 Retrieving Specific Provider for EKS 24

5.5 Modifying Providers for EKS 25

5.6 Deleting Providers for EKS 25

5.7 Creating EKS clusters 25

5.8 Retrieving all EKS clusters 26

5.9 Retrieving Specific EKS Clusters 27

5.10 Modifying EKS clusters 28

5.11 Deleting EKS clusters 29

6 Examples of API Use Cases for vSphere v3 Clusters 29

6.1 Logging in to Cisco Container Platform 29

6.2 Creating Providers for vSphere v3 30

6.3 Retrieving List of Providers 30

6.4 Retrieving Specific Provider 30

6.5 Modifying Providers 31

6.6 Deleting Providers 31

6.7 Creating EKS v3 clusters 31

6.8 Retrieving all clusters 33

6.9 Retrieving Specific Clusters 36

6.10 Deleting clusters 38

6.11 Creating ACI Profile 39
6.12 Creating ACI-enabled vSphere Cluster 39
6.13 Updating ACI Profile 39
6.14 Deleting ACI Profile 40
6.15 Listing Addons 40
6.16 Listing Catalog 41
6.17 Adding Addons 41
6.18 Adding Addons with Overrides 42
6.19 Deleting Addons 43
6.20 Adding Node Pools 43
6.21 Getting List of Node Pools 44
6.22 Modifying Node Pools 44
6.23 Deleting Node Pools 45

7 Cisco Container Platform API Reference 47

1 Overview

Cisco Container Platform API provides REST API as a language-agnostic programmatic interface for applications to send requests to a Cisco Container Platform deployment.

An API conforms to the RESTful conventions and is defined by using resource and methods. A resource is a collection of information that is identified by a Uniform Resource Identifier (URI). For example, `providerclientconfig` is a resource that is used to represent configuration information to connect to an infrastructure provider such as vCenter. Methods are HTTP methods that are exposed for a resource. The commonly used HTTP methods are POST, GET, PATCH, PUT and DELETE.

2 Accessing Cisco Container Platform API

You can access the Cisco Container Platform APIs using the following URL:
`https://<CCP IP>/2/swaggerapi`

Where, `<CCP IP>` is the Cisco Container Platform control plane web user interface address that you had used during the installation of Cisco Container Platform. It is the Ingress Controller LoadBalancer IP address.

3 Key Concepts

3.1 Provider Client Configuration

Cisco Container Platform connects to infrastructure providers such as vCenter to create and manage Virtual Machines that are used for Kubernetes Clusters. The configuration information to connect to the infrastructure provider is represented by a `providerclientconfig` resource.

3.2 Cluster

Cisco Container Platform automates the creation and lifecycle operations for Kubernetes Clusters. Each Kubernetes Cluster corresponds to a cluster resource type in Cisco Container Platform. It is identified by name for GET methods allowing you to poll the status of a Kubernetes cluster before its creation is complete. All other methods on a cluster object identify the cluster by its UUID in the URI.

3.3 User Management and Authorization

3.3.1 LDAP and Local Users

Cisco Container Platform supports Active Directory users and local users. Active directory configuration and authorization correspond to the ldap resource type in Cisco Container Platform. Local User management and authorizations correspond to the localusers resource type.

3.4 Subnets and Virtual IP Address Pools

Cisco Container Platform enables you to select an existing network, create a subnet in that network, and then create a Cisco Container Platform Virtual IP Address (VIP) pool within that subnet.
VIP pools are reserved ranges of IP addresses that are assigned as virtual IP addresses within the Cisco Container Platform clusters. Subnets correspond to network_service/subnets resource and VIP pools are a sub-resource of subnets of the type pools.

4 Examples of API Use Cases for vSphere v2 Clusters

4.1 Creating vSphere Tenant Clusters

Before you Begin

Ensure that curl and jq are installed on your client machine.

Procedure

1. Export Cisco Container Platform Virtual IP to the $CCP environment variable.

   Command

   ```
   export CCP=<Control Plane VIP>
   ```

   Example

   ```
   export CCP=10.20.30.40
   ```

2. Obtain a cookie using the username and password for your Cisco Container Platform instance.

   Command

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d 'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

   Example

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d 'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

3. Get list of Provider Client Configurations.

Command

```
curl -sk -b cookie.txt -H "Content-Type:
application/json" https://$CCP/2/providerclientconfigs/
| jq '.[].uuid'
```

Example

```
curl -sk -b cookie.txt -H "Content-Type:
application/json" https://$CCP/2/providerclientconfigs/
| jq '.[].uuid'
```

Response

```
"fb53eae8-d973-4644-b13f-893949154a22"
```

4. Configure the provider client that you want to use.

   Command

   ```
   export PCC=<Selected Provider Client Configuration>
   ```

   Example

   ```
   export PCC=fb53eae8-d973-4644-b13f-893949154a22
   ```

5. Get the list of datacenters.

   Command

   ```
   curl -sk -b cookie.txt
   https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
   enter | jq  '.Datacenters[]'
   ```

   Example

   ```
   curl -sk -b cookie.txt
   https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
   enter | jq  '.Datacenters[]'
   ```

   Response

   ```
   "RTP09"
   ```

6. Configure the datacenter that you want to use.

   Command

   ```
   export DCC=<from list of DataCenters>
   ```

   Example

   ```
   export DCC=RTP09
   ```

7. Get the list of tenant image VMs.

   Command

   ```
   curl -sk -b cookie.txt
   https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
   enter/${DCC}/vm | jq '.VMs[]| select(.| startswith("ccp-
   tenant-image"))'| sort -u
   ```

   Example

   ```
   curl -sk -b cookie.txt
   https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
   ```

```
enter/${DCC}/vm | jq '.VMs[]| select(.| startswith("ccp-
tenant-image"))'| sort -u
```

Response

```
"ccp-tenant-image-1.16.3-6.0.0.ova"
"ccp-tenant-image-1.15.6-6.0.0.ova"
```

8. Configure the name of the VM image that you want to use.

   Command

   ```
   export VM=<from list of VMs>
   ```

   Example

   ```
   export VM= ccp-tenant-image-1.16.3-6.0.0.ova
   ```

9. Get the list of networks.

   Command

   ```
   curl -sk -b cookie.txt
   https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
   enter/${DCC}/network| jq '.Networks[]'
   ```

   Example

   ```
   curl -sk -b cookie.txt
   https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
   enter/${DCC}/network| jq '.Networks[]'
   ```

   Response

   ```
   “r9-hx2-ccp”
   “Storage Controller Data Network”
   “k8-priv-iscsivm-network”
   ```

10. Configure the network that you want to use.

    Command

    ```
    export NETWORK=<From list of Networks>
    ```

    Example

    ```
    export NETWORK=r9-hx2-ccp
    ```

11. Get the list of clusters.

    Command

    ```
    curl -sk -b cookie.txt
    https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
    enter/${DCC}/cluster| jq '.Clusters[]'
    ```

    Example

    ```
    curl -sk -b cookie.txt
    https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
    enter/${DCC}/cluster| jq '.Clusters[]'
    ```

    Response

    ```
    “r9-hx2”
    ```

12. Configure the name of the cluster you want to use.

Command

```
export CLUSTER=<from list of clusters>
```

Example

```
export CLUSTER=r9-hx2
```

13. Get the list of pools.

Command

```
curl -sk -b cookie.txt
https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
enter/${DCC}/cluster/${CLUSTER}/pool| jq ".Pools[]"
```

Example

```
curl -sk -b cookie.txt
https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
enter/${DCC}/cluster/${CLUSTER}/pool| jq ".Pools[]"
```

Response

```
"Resources"
"Resources/Infrastructure"
```

14. Configure the vSphere resource pool you want to use.

Command

```
export POOL=<from list of Pools>
```

Example

```
export POOL=Resources
```

15. Get the list of datastores.

Command

```
curl -sk -b cookie.txt
https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
enter/${DCC}/datastore | jq -r '.Datastores[]| select(.|
startswith("SpringpathDS")|not)'
```

Example

```
curl -sk -b cookie.txt
https://$CCP/2/providerclientconfigs/${PCC}/vsphere/datac
enter/${DCC}/datastore | jq -r '.Datastores[]| select(.|
startswith("SpringpathDS")|not)'
```

Response

```
ds1
ISOs
Hxdump
r9-hx2-datastore-1
```

16. Configure the datastore that you want to use.

Command

```
export DATASTORE=<from list of datastores>
```

Example

```
export DATASTORE=r9-hx2-datastore-1
```

17. Configure a name for the tenant cluster.

    Note: The cluster name must start with an alphanumeric character (a-z, A-Z, 0-9). It can contain a combination of hyphen (-) symbols and alphanumeric characters (a-z, A-Z, 0-9). The maximum length of the cluster name is 46 characters.

    Command

    ```
    export NAME=<Name of cluster>
    ```

    Example

    ```
    export NAME=tc4
    ```

18. Configure a username to remotely access cluster nodes with a given sshkey.

    Command

    ```
    export USER=<Username>
    ```

    Example

    ```
    export USER=ccpuser
    ```

19. Configure the ssh public key for remote access.

    Command

    ```
    export SSHKEY=<Selected ssh public key for remote access>
    ```

    Example

    ```
    export SSHKEY=`head -1 ~/.ssh/id_rsa.pub`
    ```

    Note: If there is no public key file, please run ssh-keygen to create a key pair.

20. Get the list of subnets.

    Command

    ```
    curl -sk -b cookie.txt -H "Content-Type:
    application/json" https://$CCP/2/network_service/subnets/
    | jq -r '.[0].uuid'
    ```

    Example

    ```
    curl -sk -b cookie.txt -H "Content-Type:
    application/json" https://$CCP/2/network_service/subnets/
    | jq -r '.[0].uuid'
    ```

    Response

    ```
    "842e4baf-4877-4330-a3e3-
    4249983922a4"
    ```

21. Configure the subnet for the cluster.

    Command

    ```
    export SUBNET=<From the list of subnets>
    ```

    Example

    ```
    export SUBNET=842e4baf-4877-4330-a3e3-4249983922a4
    ```

22. Get the list of VIP pools in the subnet that you have chosen.

Command

```
curl -sk -b cookie.txt -H "Content-Type:
application/json"
https://$CCP/2/network_service/subnets/${SUBNET}/pools|
jq -r '.[0].uuid'
```

Example

```
curl -sk -b cookie.txt -H "Content-Type:
application/json"
https:$CCP/2/network_service/subnets/${SUBNET}/pools| jq
-r '.[0].uuid'
```

Response

```
"fef830ce-dc92-46fe-8acb-01eaa539dc46"
```

23. Select the appropriate VIP pool if there are multiple options.

Command

```
export VIP_POOL=<From the list of pools>
```

Example

```
export VIP_POOL=fef830ce-dc92-46fe-8acb-01eaa539dc46
```

24. Copy and paste the following code to create a cluster json payload.

```
#————————————————————————
cat <<EOF > cluster_create.json
{
  "provider_client_config_uuid": "${PCC}",
  "type": 1,
  "cluster": "${CLUSTER}",
  "name": "${NAME}",
  "description": "",
  "workers": 2,
  "masters": 1,
  "vcpus": 2,
  "memory": 8192,
  "datacenter": "${DCC}",
  "datastore": "${DATASTORE}",
  "networks": [
    "${NETWORK}"
  ],
   "ingress_vip_pool_id": "${SUBNET}",
   "load_balancer_ip_num": 1,
      "resource_pool": "${CLUSTER}/${POOL}",
      "template": "${VM}",
      "ssh_user": "${USER}",
      "ssh_key": "${SSHKEY}",
      "deployer_type": "kubeadm",
      "kubernetes_version": "1.11.3",
      "deployer": {
      "provider_type": "vsphere",
      "provider": {
        "vsphere_datacenter": "${DCC}",
        "vsphere_datastore": "${DATASTORE}",
        "vsphere_client_config_uuid": "${PCC}",
        "vsphere_working_dir": "\/${DCC}\/vm"
      }
   }
}
EOF
```

```
#————————————————————————————
```

25. Edit the `cluster_create.json` file to modify the number of workers, CPUs, memory, Kubernetes version, or description as needed.
26. Create a tenant cluster.

    Command

    ```
    curl -sk -X POST -b cookie.txt -H "Content-Type:
    application/json" -d @cluster_create.json
    https://$CCP/2/clusters | tee output.txt | jq
    '.name,.uuid,.state'
    ```

    Example

    ```
    curl -sk -X POST -b cookie.txt -H "Content-Type:
    application/json" -d @cluster_create.json
    https://$CCP/2/clusters | tee output.txt | jq
    '.name,.uuid,.state'
    ```

    Response

    ```
    "tc4"

    "8ccaa3a1-8a11-4996-9224-5723b7ecfdfd"

    "READY"
    ```

27. Configure the tenant cluster UUID.

    Command

    ```
    export TC=<UUID of the selected tenant cluster>
    ```

    Example

    ```
    export TC=8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
    ```

28. Download the KUBECONFIG environment file.

    Command

    ```
    curl -sk -b cookie.txt https://$CCP/2/clusters/${TC}/env
    -o ${TC}.env
    ```

    Example

    ```
    curl -sk -b cookie.txt https://$CCP/2/clusters/${TC}/env
    -o ${TC}.env
    ```

29. Export the config file to KUBECONFIG environment variable.

    Command

    ```
    export KUBECONFIG=./${TC}.env
    ```

    Example

    ```
    export KUBECONFIG=./${TC}.env
    ```

30. View nodes on a tenant cluster.

    Command

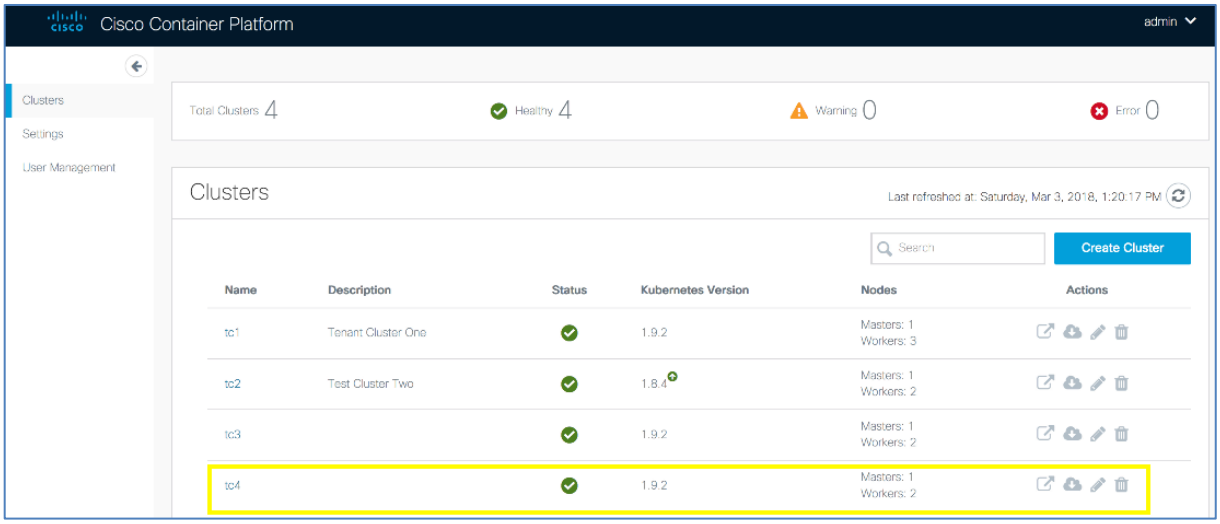
    ```
    kubectl get nodes -o wide
    ```

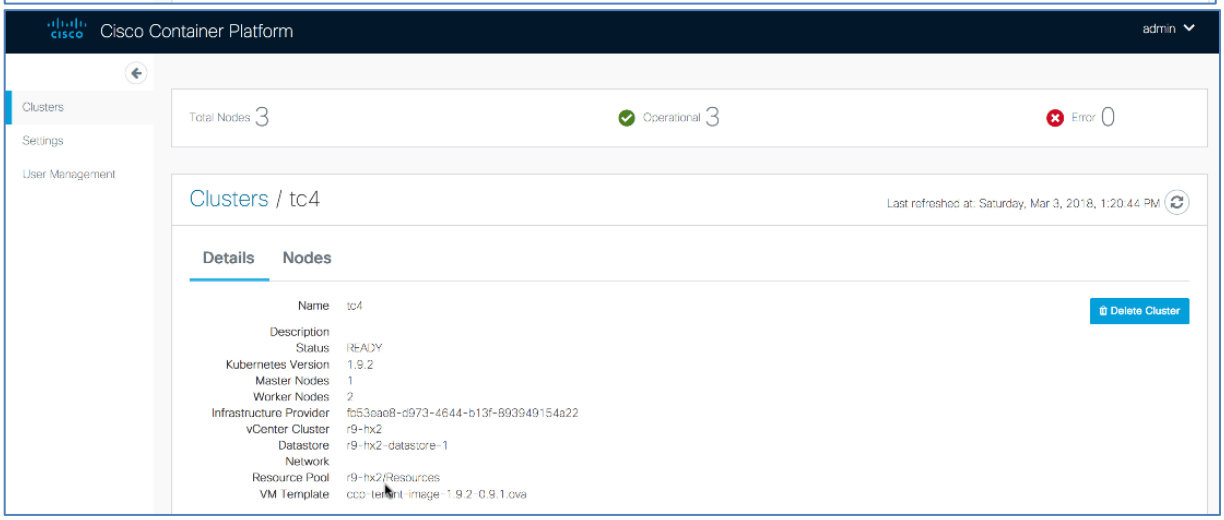
    Example

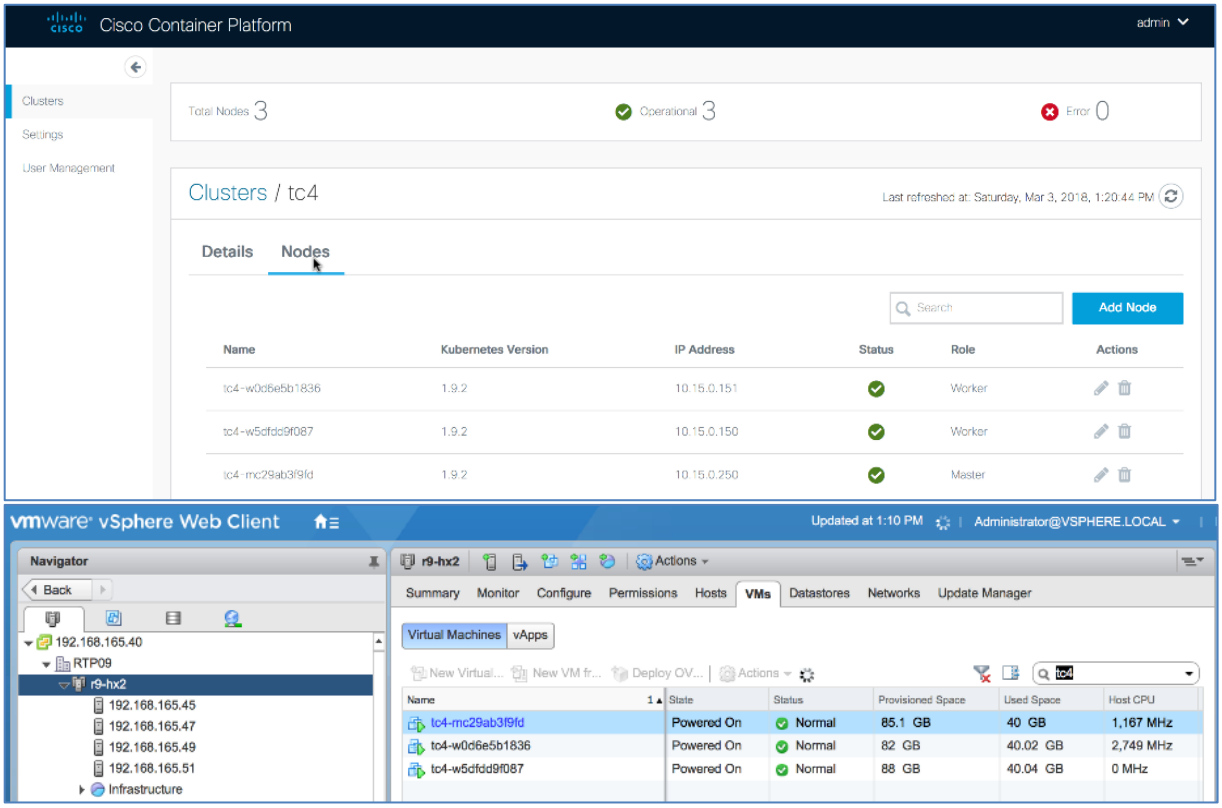
```
kubectl get nodes -o wide
```

Response

```
NAME              STATUS   ROLES    AGE   VERSION   EXTERNAL-IP     OS-IMAGE             KERNEL VERSION      CONTAINER RUNTIME
tc4-mc29ab3f9fd   Ready    master   3m    v1.9.2    10.15.0.250     Ubuntu 16.04.3 LTS   4.4.0-104-generic   Docker://1.13.1
tc4-w0d6e5b1836   Ready    <none>   2m    v1.9.2    10.15.0.151     Ubuntu 16.04.3 LTS   4.4.0-104-generic   Docker://1.13.1
Tc4-w5dfdd9f087   Ready    <none>   2m    v1.9.2    10.15.0.150     Ubuntu 16.04.3 LTS   4.4.0-104-generic   Docker://1.13.1
```







4.2 Deleting vSphere Tenant Clusters

Before you Begin

Ensure that curl and jq are installed on your client machine.

Procedure

1. Export Cisco Container Platform Virtual IP to the $CCP environment variable.

   Command

   ```
   export CCP=<Control Plane VIP>
   ```

   Example

   ```
   export CCP=10.20.30.40
   ```

2. Obtain a cookie using the username and password for your Cisco Container Platform instance.

   Command

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

   Example

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d 'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

3. List tenant clusters.

   Command

```
curl -sk -b cookie.txt https://$CCP/2/clusters| jq -r
'.[].name, .uuid'
```

Example

```
curl -sk -b cookie.txt https://$CCP/2/clusters| jq -r
'.[].name, .uuid'
```

Response

```
tc1
aef65a35-c013-4d91-9edb-e2ef8359f95b
tc2
8dab31ef-3efa-4de6-9e0d-07e6ff68bc24
tc3
a523fce7-b71e-444a-9626-871e17fe1fcd
tc4
8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
```

4. Export the tenant cluster.

   Command

   ```
   export TC=<selected cluster from list>
   ```

   Example

   ```
   export TC=8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
   ```

5. Delete the tenant cluster.

   Command

   ```
   curl -sk -b cookie.txt -X DELETE
   https://$CCP/2/clusters/${TC}
   ```

   Example

   ```
   curl -sk -b cookie.txt -X DELETE
   https://$CCP/2/clusters/${TC}
   ```

4.3 Configuring Windows AD Service Account for Authentication

Before you Begin

Ensure that curl and jq are installed on your client machine.

Procedure

1. Export Cisco Container Platform Virtual IP to the $CCP environment variable.

   Command

   ```
   export CCP=<Control Plane VIP>
   ```

   Example

   ```
   export CCP=10.20.30.40
   ```

2. Obtain a cookie using the username and password for your Cisco Container Platform instance.

   Command

```
curl -k -c cookie.txt -H "Content-Type:application/x-www-
form-urlencoded" -d 'username=admin&password=<Password
from the installer>' https://$CCP/2/system/login/
```

Example

```
curl -k -c cookie.txt -H "Content-Type:application/x-www-
form-urlencoded" -d 'username=admin&password=<Password
from the installer>' https://$CCP/2/system/login/
```

3. Query Windows AD server to verify the Service Account connection and members of the Cisco Container Platform accounts.

Command

```
ldapsearch -x -h <AD Server> -D "<Bind Distinguished
Name>" -w '<Password>' -b "<Base Distinguished Name>" -s
"<Scope>"
```

Example

```
ldapsearch -x -h 192.0.2.1 -D "CN=Adam A.
Arkanis,CN=Users,DC=r9-hx,DC=local" -w 'Password' -b
"dc=r9-hx,dc=local" -s sub "(cn=CCP*)" member cn
```

Response

```
# extended LDIF
#
# LDAPv3
# base <dc=r9-hx,dc=local> with scope subtree
# filter: (cn=CCP*)
# requesting: member cn
#

# CCPAdmins, Users, r9-hx.local
dn: CN=CCPAdmins,CN=Users,DC=r9-hx,DC=local
cn:  CCPAdmins
member: CN=Andrew A.  Andres,CN=Users,DC=r9-hx,DC=local
member: CN=Adam A.  Arkanis,CN=Users,DC=r9-hx,DC=local

# CCPDevOps, Users, r9-hx.local
dn: CN=CCPDevOps,CN=Users,DC=r9-hx,DC=local
cn: CCPDevOps
member: CN=Bob B. Bondurant,CN=Users,DC=r9-hx,DC=local
member: CN=Becky B. Bartholemew,CN=Users,DC=r9-
hx,DC=local
```

4. Create json payload file for creating AD service account in Cisco Container Platform.

Command

```
cat << EOF > ldap_serviceaccount.json
{
  "Server": " <AD Server>",
  "Port": 3268,
  "ServiceAccountDN": "<Bind Distinguished Name>",

  "ServiceAccountPassword": "<Password>",

  "StartTLS": false,
  "InsecureSkipVerify": true
```

```
}
EOF
```

Example

```
cat << EOF > ldap_serviceaccount.json
{
  "Server": ” 192.0.2.1”,
  "Port": 3268,
  "ServiceAccountDN": "CN=Adam A. Arkanis,CN=Users,DC=r9-
hx,DC=local",
  "ServiceAccountPassword": "Password",
  "StartTLS": false,
  "InsecureSkipVerify": true
}
EOF
```

5. Create the service account for Cisco Container Platform.

Command

```
curl -sk -b cookie.txt -X PUT -H "Content-Type:
application/json" -d @ldap_serviceaccount.json
https://$CCP/2/ldap/setup
```

Example

```
curl -sk -b cookie.txt -X PUT -H "Content-Type:
application/json" -d @ldap_serviceaccount.json
https://$CCP/2/ldap/setup
```

Response

```
{
    “Server”: ” 192.0.2.1”,
    “Port”: 3268,
    “BaseDN”: “DC=r9-hx,DC=local”,
    “ServiceAccountDN”: “CN=Adam A.
Arkanis,CN=Users,DC=r9-hx,DC=local”,
    “ServiceAccountPassword”: “”,
    “StartTLS”: false,
    “InsecureSkipVerify”: true
}
```

6. Confirm service account configuration.

Command

```
curl -k -b cookie.txt https://$CCP/2/ldap/setup
```

Example

```
curl -k -b cookie.txt https://$CCP/2/ldap/setup
```

Response

```
{
     “Server”: ” 192.0.2.1”,
     “Port”: 3268,
     “BaseDN”: “DC=r9-hx,DC=local”,
     “ServiceAccountDN”: “CN=Adam A.
Arkanis,CN=Users,DC=r9-hx,DC=local”,
```

```
        "ServiceAccountPassword":  "",
        "StartTLS":  false,
        "InsecureSkipVerify":  true
}
```

4.4 Managing Windows AD Group Authorizations for Tenant Clusters

Before you Begin

Ensure that curl and jq are installed on your client machine.

Procedure

1. Export Cisco Container Platform Virtual IP to the $CCP environment variable.

   Command

   ```
   export CCP=<Control Plane VIP>
   ```

   Example

   ```
   export CCP=10.20.30.40
   ```

2. Obtain a cookie using the username and password for your Cisco Container Platform instance.

   Command

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d 'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

   Example

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d 'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

3. Create json payload file for assigning an AD group to a SysAdmin or DevOps role.

   ```
   cat << EOF > ldap_devops_group.json
   {
     "LdapDN": "CN=CCPDevOps,CN=Users,DC=r9-hx,DC=local",
     "Role": "DevOps"
   }
   EOF
   ```

4. Create an LDAP group.
   An error message is displayed, if an LDAP group already exists and can continue with script.

   Command

   ```
   curl -sk -b cookie.txt -X POST -H "Content-Type:
   application/json" -d @ldap_devops_group.json
   https://$CCP/2/ldap/groups
   ```

   Example

   ```
   curl -sk -b cookie.txt -X POST -H "Content-Type:
   application/json" -d @ldap_devops_group.json
   https://$CCP/2/ldap/groups
   ```

   Response

```
{
  “LdapDN”: “CN=CCPDevOps,CN=Users,DC=r9-hx,DC=local”,
  “Role”: “DevOps”
}
```

5. Get list of configured AD groups in Cisco Container Platform.

   Command

   ```
   curl -sk -b cookie.txt https://$CCP/2/ldap/groups
   ```

   Example

   ```
   curl -sk -b cookie.txt https://$CCP/2/ldap/groups
   ```

   Response

   ```
   [
    {
      “LdapDN”: “CN=CCPDevOps,CN=Users,DC=r9-hx,DC=local”,
      “Role”: “DevOps”
     }
   ]
   #Return list of clusters to assign AD group to
   ```

6. Get list of clusters for which you want to assign an AD group.

   Command

   ```
   curl -sk -b cookie.txt https://$CCP/2/clusters| jq -r
   '.[]|.name, .uuid'
   ```

   Example

   ```
   curl -sk -b cookie.txt https://$CCP/2/clusters| jq -r
   '.[]|.name, .uuid'
   ```

   Response

   ```
   tc1
   aef65a35-c013-4d91-9edb-e2ef8359f95b
   tc2
   8dab31ef-3efa-4de6-9e0d-07e6ff68bc24
   tc3
   a523fce7-b71e-444a-9626-871e17fe1fcd
   tc4
   8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
   ```

7. Export the selected tenant cluster.

   Command

   ```
   export TC=<Selected tenant cluster>
   ```

   Example

   ```
   export TC=8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
   ```

8. Create a json payload for assigning AD group to a tenant cluster.

   ```
   cat << EOF > ldap_authz.json
   {
     "name": "CN=CCPDevOps,CN=Users,DC=r9-hx,DC=local",
   ```

```
  "local": false
 }
EOF
```

9. Authorize group access to the selected tenant cluster.

   Command

   ```
   curl -sk -b cookie.txt -X POST -H "Content-Type:
   application/json" -d @ldap_authz.json
   https://$CCP/2/clusters/${TC}/authz
   ```

   Example

   ```
   curl -sk -b cookie.txt -X POST -H "Content-Type:
   application/json" -d @ldap_authz.json
   https://$CCP/2/clusters/${TC}/authz
   ```

   ```
   {
     "AuthID": "743e54da-037e-4386-99a7-a3da36e51936",
     "Name": "CN=CCPDevOps,CN=Users,DC=r9-hx,DC=local",
     "Local": false
   }
   ```

10. Verify authorization of AD group to the tenant cluster.

    Command

    ```
    curl -sk -b cookie.txt https://$CCP/2/clusters/${TC}/authz
    ```

    Example

    ```
    curl -sk -b cookie.txt
    https://$CCP/2/clusters/${TC}/authz
    ```

    Response

    ```
    {
      "AuthList":[
        {
         "AuthID": "743e54da-037e-4386-99a7-a3da36e51936",
         "Name": "CN=CCPDevOps,CN=Users,DC=r9-hx,DC=local",
         "Local": false
        }
       ]
    }
    ```

11. Authenticate as a user from an AD DevOps group.

    Command

    ```
    curl -sk -c cookie_user.txt -H "Content-
    Type:application/x-www-form-urlencoded" -d "username=<AD
    User>&password=<Password>" https://$CCP/2/system/login/
    ```

    Example

    ```
    curl -sk -c cookie_user.txt -H "Content-
    Type:application/x-www-form-urlencoded" -d
    "username=BobBB&password=Password"
    https://$CCP/2/system/login/
    ```

12. Verify tenant cluster access list for an AD user.

    Command

    ```
    curl -sk -b cookie_user.txt https://$CCP/2/clusters| jq -r '.[]|.name, .uuid'
    ```

    Example

    ```
    curl -sk -b cookie_user.txt https://$CCP/2/clusters| jq -r '.[]|.name, .uuid'
    ```

    Response

    ```
    tc4

    8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
    ```

13. Export the selected tenant cluster.

    Command

    ```
    export TC=<Selected tenant cluster>
    ```

    Example

    ```
    export TC=8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
    ```

14. Download the KUBECONFIG environment file.

    Command

    ```
    curl -sk -b cookie.txt https://$CCP/2/clusters/${TC}/env -o ${TC}.env
    ```

    Example

    ```
    curl -sk -b cookie.txt https://$CCP/2/clusters/${TC}/env -o ${TC}.env
    ```

15. Export the config file to KUBECONFIG environment variable.

    Command

    ```
    export KUBECONFIG=./${TC}.env
    ```

    Example

    ```
    export KUBECONFIG=./${TC}.env
    ```

16. View nodes on the tenant cluster.

    Command

    ```
    kubectl get nodes -o wide
    ```

    Example

    ```
    kubectl get nodes -o wide
    ```

    Response

    ```
    NAME              STATUS   ROLES   AGE   VERSION   EXTERNAL-IP  OS-IMAGE           KERNEL VERSION
    CONTAINER-RUNTIME

    tc4-mc29ab3f9fd   Ready    master  1h    v1.9.2    10.20.30.250  Ubuntu 16.04.3 LTS  4.4.0-104-generic
    docker://1.13.1

    tc4-w0d6e5b1836   Ready    <none>  1h    v1.9.2    10.20.30.151  Ubuntu 16.04.3 LTS  4.4.0-104-generic
    docker://1.13.1

    tc4-w5dfdd9f087   Ready    <none>  1h    v1.9.2    10.20.30.150  Ubuntu 16.04.3 LTS  4.4.0-104-generic
    docker://1.13.1
    ```

17. Remove AD group access.

    Command

    ```
    curl -sk -b cookie.txt -X DELETE
    https://$CCP/2/ldap/groups/<DN of Group>
    ```

    Example

    ```
    curl -sk -b cookie.txt -X DELETE
    https://$CCP/2/ldap/groups/CN=CCPDevOps,CN=Users,DC=r9-
    hx,DC=local
    ```

18. Verify that authorization of AD group to tenant cluster is removed.

    Command

    ```
    curl -sk -b cookie.txt
    https://$CCP/2/clusters/${TC}/authz
    ```

    Example

    ```
    curl -sk -b cookie.txt
    https://$CCP/2/clusters/${TC}/authz
    ```

    Response

    ```
    {
      "AuthList": []
    }
    ```

4.5 Downloading Tenant Cluster KUBECONFIG Environment File

Before you Begin

Ensure that curl and jq are installed on your client machine.

Procedure

1. Export Cisco Container Platform Virtual IP to the $CCP environment variable.

   Command

   ```
   export CCP=<Control Plane VIP>
   ```

   Example

   ```
   export CCP=10.20.30.40
   ```

2. Obtain a cookie using the username and password for your Cisco Container Platform instance.

   Command

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d 'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

   Example

   ```
   curl -k -c cookie.txt -H "Content-Type:application/x-www-
   form-urlencoded" -d 'username=admin&password=<Password
   from the installer>' https://$CCP/2/system/login/
   ```

3. List tenant clusters.

Command

```
curl -sk -b cookie.txt https://$CCP/2/clusters| jq -r
'.[]|.name, .uuid
```

Example

```
curl -sk -b cookie.txt https://$CCP/2/clusters| jq -r
'.[]|.name, .uuid'
```

Response

```
tc1
aef65a35-c013-4d91-9edb-e2ef8359f9gb
tc2
8dab31ef-3efa-4de6-9e0d-07e6ff68bc24
tc3
a523fce7-b71e-444a-9626-871e17fe1fcd
tc4
8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
```

4. Export a tenant cluster.

Command

```
export TC=<selected cluster from list>
```

Example

```
export TC=8ccaa3a1-8a11-4996-9224-5723b7ecfdfd
```

5. Download the KUBECONFIG environmental file.

Command

```
curl -sk -b cookie.txt https://$CCP/2/clusters/${TC}/env
-o ${TC}.env
```

Example

```
curl -sk -b cookie.txt https://$CCP/2/clusters/${TC}/env
-o ${TC}.env
```

6. Export the config file to KUBECONFIG environment variable.

Command

```
export KUBECONFIG=./${TC}.env
```

Example

```
export KUBECONFIG=./${TC}.env
```

7. View nodes on the tenant cluster.

Command

```
kubectl get nodes -o wide
```

Example

```
kubectl get nodes -o wide
```

Response

```
NAME             STATUS   ROLES    AGE   VERSION   EXTERNAL-IP   OS-IMAGE           KERNEL VERSION     CONTAINER-RUNTIME
tc4-mc29ab3f9fd   Ready    master   1h    v1.9.2    10.20.30.250  Ubuntu 16.04.3 LTS  4.4.0-104-generic  docker://1.13.1
tc4-w0d6e5b1836   Ready    <none>   1h    v1.9.2    10.20.30.151  Ubuntu 16.04.3 LTS  4.4.0-104-generic  docker://1.13.1
tc4-w5dfdd9f087   Ready    <none    1h    v1.9.2    10.20.30.150  Ubuntu 16.04.3 LTS  4.4.0-104-generic  docker://1.13.1
```

4.6 Obtaining TC Master and Ingress VIPs

FOR MASTER

```
`curl -sk -X GET -b temp/cookie.txt
https://$CCP/2/clusters/<clustername> | jq  '.master_vip`
```

FOR INGRESS VIPS

```
`curl -sk -X GET -b temp/cookie.txt
https://$CCP/2/clusters/<cluster> | jq  '.ingress_vips`
```

5 Examples of API Use Cases for AWS EKS Clusters

V3 API support providers and clusters for EKS, vSphere and AKS clusters. Sections 5 and 6 give examples for usage with EKS and vSphere respectively using v3 API.

You need to export Cisco Container Platform Virtual IP to the $CCP environment variable.

Command

```
export CCP=<Control Plane VIP>
```

Example

```
export CCP=10.20.30.40
```

5.1 Logging in to Cisco Container Platform

Command

```
curl -c cookies.txt -k -X POST -d
"username=admin&password=<your_password>" -H "Content-
Type:application/x-www-form-urlencoded"
"https://$CCP/v3/system/login"
```

Example

1. Log in to Cisco Container Platform.

```
curl -c cookies.txt -k -X POST -d
"username=admin&password=my_password" -H "Content-
Type:application/x-www-form-urlencoded"
"https://10.20.30.40/2/system/login"
```

2. Retrieve the token from the cookies.txt file created as a result of the above command and then store it in an environment variable like this:

```
$ cat cookies.txt
# Netscape HTTP Cookie File
# https://curl.haxx.se/docs/http-cookies.html
# This file was generated by libcurl! Edit at your own
risk.

10.20.30.40   FALSE    /    FALSE    0    CXAccessToken
    eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJBTExfQ0xVU1RFUl
NfQVVUSCI6dHJ1ZSwiZXhwIjoxNTQ4NjM5MDMyLCJyb2xlIjoiQWRtaW5pc
3RyYXRvciJ9.ypjTZFKKmfuBvRxodu-MLedIkQROVNqHdqXgKKdAv7M
```

3. Set your env variable using the token value obtained from Step 2.

```
export
TOKEN=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJBTExfQ0xVU1RF
UlNfQVVUSCI6dHJ1ZSwiZXhwIjoxNTQ4NjM5MDMyLCJyb2xlIjoiQWRtaW5
pc3RyYXRvciJ9.ypjTZFKKmfuBvRxodu-MLedIkQROVNqHdqXgKKdAv7M
```

5.2 Creating Providers for EKS

Command

```
curl -k -X POST -H "x-auth-token: $TOKEN" -d \
'{
            "type": "eks",
            "name":"name_of_your_eks_cluster",
            "role_arn": "you_aws_role_arn",
            "access_key_id": "your_AWS_access_key_id",
            "secret_access_key": "your_AWS_secret_access_key"
}' $https://$CCP/v3/providers/
```

Example

```
curl -k -X POST -H "x-auth-token: $TOKEN" -d \
'{
            "type": "eks",
            "name":"selvi-eks-provider",
            "role_arn":
"arn:aws:iam::123456789123:role/eksServiceRole",
            "access_key_id": "ABCDEFGHIJKLMNOPQRST",
            "secret_access_key":
"THISISNOTAREALSECRETKEYBUTLOOKSLIKEONE"
}' https://10.20.30.40/v3/providers/
```

5.3 Retrieving List of Providers for EKS

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/providers
```

Example

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://10.20.30.40/v3/providers
```

5.4 Retrieving Specific Provider for EKS

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/providers/<provider_uuid>/
```

Example

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN" https://
10.20.30.40/v3/providers/17d7d949-cf95-4676-80a7-ae3d773dc3b0/
```

Response

```
[
    {
        "access_key_id": "ABCDEFGHIJKLMNOPQRST",
```

```
        "id": "7edd7790-a776-4a91-91f3-0938483dbf78",
        "name": "selvi-eks-provider",
        "role_arn": "arn:aws:iam::12345678912:role/ccp-eks-
7edd7790-a776-4a91-91f3-0938483dbf78",
        "type": "eks"
    }
]
```

5.5 Modifying Providers for EKS

You cannot update the provider details once it is created. This includes parameters such as the Role_ARN, Type, Access_Key_ID, and Secret_Access_Key.

5.6 Deleting Providers for EKS

Command

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://$CCP/v3/providers/<provider_uuid>/
```

Example

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://10.20.30.40/v3/providers/7edd7790-a776-4a91-91f3-
0938483dbf78/
```

5.7 Creating EKS clusters

Command

```
curl -k -X POST  -H "x-auth-token: $TOKEN" -d \
'{
    "provider":"provider_uuid",
    "vpc_sizing": {
      "subnet":"<your_desired_subnet>",
      "public_subnets": ["<desired_pub_subnet1>",
"<desired_pub_subnet2>", " <desired_pub_subnet3>”],
      "private_subnets": ["<desired_priv_subnet1>",
"<desired_priv_subnet2>", "<desired_priv_subnet3>"]
},
    "region":"<aws_region_string>",
    "type":"eks",
    "ami": "<ami_id>",
    "instance_type": "<amazon_instance_type>",
    "worker_count": <number_of_workers_in_eks_cluster>,
    "access_role_arn":"<arn_of_role_in_your_aws_account>",
    "name": "<name_of_your_eks_cluster>",
    "ssh_keys":
["<your_ssh_key_to_be_able_to_access_your_workers>",
"<optionally_another_ssh_key>"]
}' https://$CCP/v3/clusters/
```

Example

```
curl -k -X POST -H "x-auth-token: $TOKEN" -d \
'{
    "provider":"17d7d949-cf95-4676-80a7-ae3d773dc3b0",
    "vpc_sizing": {
      "subnet":"10.20.0.0/16",
```

```
        "public_subnets": ["10.20.1.0/24", "10.20.2.0/24",
"10.20.3.0/24"],
        "private_subnets": ["10.20.4.0/24", "10.20.5.0/24",
"10.20.6.0/24"]
    },
    "region":"us-west-2",
    "type":"eks",
    "ami": "ami-09677889326e51ea1",
    "instance_type": "t2.small",
    "worker_count": 1,

"access_role_arn":"arn:aws:iam::123456789123:role/KubernetesAdmi
n",
    "name": "selvi_eks_1",
    "ssh_keys": ["ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAIHdSrKkWhwED6awk9sjegF0dgcKnotmyrealkey
selvik@SELVIK-M-C1DM", "another_dummy"]
}' https://10.20.30.40/v3/clusters/
```

Response

```
{
   "id":"094c1544-58e5-46cf-8a3f-94de81f35574",
   "type":"eks",
   "name":" selvi_eks_1",
   "provider":"17d7d949-cf95-4676-80a7-ae3d773dc3b0",
   "region":"us-west-2",
   "status":"CREATING",
   "status_detail":null,
   "access_role_arn":"arn:aws:iam::123456789123:role/KubernetesA
dmin",
   "kubeconfig":null,
   "vpc_sizing":{
      "subnet":"10.20.0.0/16",
      "public_subnets":[
         "10.20.1.0/24",
         "10.20.2.0/24",
         "10.20.3.0/24"
      ],
      "private_subnets":[
         "10.20.4.0/24",
         "10.20.5.0/24",
         "10.20.6.0/24"
      ]
   },
   "ami":"ami-09677889326e51ea1",
   "instance_type":"t2.small",
   "ssh_key_name":"",
   "worker_count":1,
   "vpc_id":null
}
```

Note: The API returns the values immediately and the status is indicated as *CREATING*.

5.8 Retrieving all EKS clusters

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/clusters
```

Example

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://10.10.99.190/v3/clusters
```

Response


```
[
   {
      "id":"094c1544-58e5-46cf-8a3f-94de81f35574",
      "type":"eks",
      "name":"selvi_eks_1",
      "provider":"17d7d949-cf95-4676-80a7-ae3d773dc3b0",
      "region":"us-west-2",
      "status":"CREATING_MASTER",
      "status_detail":"",
      "access_role_arn":"arn:aws:iam::123456789123:role/Kubernet
esAdmin",
      "kubeconfig":null,
      "vpc_sizing":{
         "subnet":"10.20.0.0/16",
         "public_subnets":[
            "10.20.1.0/24",
            "10.20.2.0/24",
            "10.20.3.0/24"
         ],
         "private_subnets":[
            "10.20.4.0/24",
            "10.20.5.0/24",
            "10.20.6.0/24"
         ]
      },
      "ami":"ami-09677889326e51ea1",
      "instance_type":"t2.small",
      "ssh_key_name":"",
      "worker_count":1,
      "vpc_id":"vpc-thisis72e6cnotreal"
   }
]
```


5.9 Retrieving Specific EKS Clusters

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN" https://$CCP/v3/
/clusters/<your_cluster_uuid>/
```

Example

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://10.10.99.190/v3/clusters/5a5f0db5-110c-4151-80e8-
9b78889d30bc/
```

Response


```
[
   {
      "id":"094c1544-58e5-46cf-8a3f-94de81f35574",
      "type":"eks",
      "name":"selvi_eks_1",
      "provider":"17d7d949-cf95-4676-80a7-ae3d773dc3b0",
      "region":"us-west-2",
      "status":"CREATING_MASTER",
      "status_detail":"",
      "access_role_arn":"arn:aws:iam::123456789123:role/Kubernet
```

```
esAdmin",
      "kubeconfig":null,
      "vpc_sizing":{
         "subnet":"10.20.0.0/16",
         "public_subnets":[
            "10.20.1.0/24",
            "10.20.2.0/24",
            "10.20.3.0/24"
         ],
         "private_subnets":[
            "10.20.4.0/24",
            "10.20.5.0/24",
            "10.20.6.0/24"
         ]
      },
      "ami":"ami-09677889326e51ea1",
      "instance_type":"t2.small",
      "ssh_key_name":"",
      "worker_count":1,
      "vpc_id":"vpc-thisis72e6cnotreal"
   }
]
```


5.10 Modifying EKS clusters

Command

```
curl -k -X PATCH -H "x-auth-token: $TOKEN" -d \
'{
    "worker_count": 2
}' https://$CCP/v3/clusters/<cluster_uuid>/
```

Example

```
curl -k -X PATCH -H "x-auth-token: $TOKEN" -d \
'{
    "worker_count": 2
}' https://10.20.99.190/v3/clusters/5a5f0db5-110c-4151-80e8-
9b78889d30bc/
```

Response


```
[
   {
      "id":"094c1544-58e5-46cf-8a3f-94de81f35574",
      "type":"eks",
      "name":"selvi_eks_1",
      "provider":"17d7d949-cf95-4676-80a7-ae3d773dc3b0",
      "region":"us-west-2",
      "status":"CREATING_MASTER",
      "status_detail":"",
      "access_role_arn":"arn:aws:iam::123456789123:role/Kubernet
esAdmin",
      "kubeconfig":null,
      "vpc_sizing":{
         "subnet":"10.20.0.0/16",
         "public_subnets":[
            "10.20.1.0/24",
            "10.20.2.0/24",
            "10.20.3.0/24"
         ],
         "private_subnets":[
            "10.20.4.0/24",
```

```
                "10.20.5.0/24",
                "10.20.6.0/24"
            ]
        },
        "ami":"ami-09677889326e51ea1",
        "instance_type":"t2.small",
        "ssh_key_name":"",
        "worker_count":1,
        "vpc_id":"vpc-thisis72e6cnotreal"
    }
]
```

5.11 Deleting EKS clusters

Command

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://$CCP/v3/clusters/cluster_uuid/
```

Example

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://10.10.99.190/v3/clusters/5a5f0db5-110c-4151-80e8-
9b78889d30bc/
```

6 Examples of API Use Cases for vSphere v3 Clusters

You need to export Cisco Container Platform Virtual IP to the $CCP environment variable.

Command

```
export CCP=<Control Plane VIP>
```

Example

```
export CCP=10.20.30.40
```

6.1 Logging in to Cisco Container Platform

Commands

```
export CCP=$CCP
export TOKEN=$(curl -v -k -X POST \
    -H "Content-Type:application/x-www-form-urlencoded" \
    -d "username=<CCP Username>&password=<CCP Password>" \
    https://$CCP/v3/system/login  2> >(grep -i x-auth-token) |
\
    grep i- x-auth-token | awk -F ":" '{print $2}' | tr -d
'\n\r')
```

Example

Log in to Cisco Container Platform and get the X-Auth-Token.

```
export TOKEN=$(curl -v -k -X POST \
    -H "Content-Type:application/x-www-form-urlencoded" \
    -d "username=admin&password=password" \
```

```
    https://$CCP/v3/system/login  2> >(grep -i x-auth-token) |
\
    grep -i x-auth-token | awk -F ":" '{print $2}' | tr -d
'\n\r')
echo $TOKEN
```

6.2 Creating Providers for vSphere v3

Command

```
curl -k -X POST -H "x-auth-token: $TOKEN" -d \
'{
            "type": "vsphere",
            "name":"name_of_vsphere_provider",
            "address": "vCenter_url",
            "username": "vCenter_username",
            "password": "vCenter_password",
            "port": "vCenter_port",
            "insecure_skip_verify" : true_or_false
}' https://$CCP/v3/providers/
```

Example

```
curl -k -X POST -H "x-auth-token: $TOKEN" -d \
'{
            "type": "vsphere",
            "name":"hx3",
            "address": "vcenter.domain.com",
            "username": "administrator@vsphere.local",
            "password": "password",
            "port": "443",
            "insecure_skip_verify": true
}' https://10.20.30.40/v3/providers/
```

6.3 Retrieving List of Providers

Command

```
curl -k -X GET -H "X-Auth-Token: $TOKEN"
https://$CCP/v3/providers/
```

Example

```
curl -k -X GET -H "x-auth-token: $TOKEN"
https://10.20.30.40/v3/providers/
```

6.4 Retrieving Specific Provider

Command

```
curl -k -X GET -H "X-Auth-Token:$TOKEN"
https://$CCP/v3/providers/<provider_uuid>/
```

Example

```
curl -k -X GET -H "X-Auth-Token: $TOKEN"
https://10.20.30.40/v3/providers/b54efda6-78c7-4418-9b89-
955da6585984/
```

Response

```
{
    "id": "b54efda6-78c7-4418-9b89-955da6585984",
    "type": "vsphere",
    "name": "vcenter",
```

```
    "address": " vcenter.domain.com",
    "port": 443,
    "username": "administrator@vsphere.local",
    "insecure_skip_verify": true
}
```

6.5 Modifying Providers

Command

```
curl -k -X PATCH -H "x-auth-token: $TOKEN" -d  \
'{
            "type": "vsphere",
            "name":"name_of_vsphere_provider",
            "address": "vCenter_url",
            "username": "vCenter_username",
            "password": "vCenter_password",
            "port": "vCenter_port",
            "insecure_skip_verify" : true_or_false
}' https://$CCP/v3/providers/your_provider_id/
```

Example

```
curl -k -X PATCH -H "x-auth-token: $TOKEN" -d \
'{
            "type": "vsphere",
            "name":"vcenter-1",
            "address": "vcenter.domain.com",
            "username": "administrator@vsphere.local",
            "password": "password",
            "port": "443",
            "insecure_skip_verify": true
}' https://10.20.30.40/v3/providers/b54efda6-78c7-4418-9b89-
955da6585984/
```

Response

```
{
    "id": "b54efda6-78c7-4418-9b89-955da6585984",
    "type": "vsphere",
    "name": "vcenter-1",
    "address": " vcenter.domain.com",
    "port": 443,
    "username": "administrator@vsphere.local",
    "insecure_skip_verify": true
}
```

6.6 Deleting Providers

Command

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://$CCP/v3/providers/<provider_uuid>/
```

Example

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://10.20.30.40/v3/providers/7edd7790-a776-4a91-91f3-
0938483dbf78/
```

6.7 Creating EKS v3 clusters

Command

```
curl -k -X POST  -H "x-auth-token: $TOKEN" -d \
'{
    "provider":"provider_uuid",
    "vpc_sizing": {
      "subnet":"<your_desired_subnet>",
      "public_subnets": ["<desired_pub_subnet1>",
"<desired_pub_subnet2>", " <desired_pub_subnet3>”],
      "private_subnets": ["<desired_priv_subnet1>",
"<desired_priv_subnet2>", "<desired_priv_subnet3>"]
},
    "region":"<aws_region_string>",
    "type":"eks",
    "ami": "<ami_id>",
    "instance_type": "<amazon_instance_type>",
    "worker_count": <number_of_workers_in_eks_cluster>,
    "access_role_arn":"<arn_of_role_in_your_aws_account>",
    "name": "<name_of_your_eks_cluster>",
    "ssh_keys":
["<your_ssh_key_to_be_able_to_access_your_workers>",
"<optionally_another_ssh_key>"]
}' https://$CCP/v3/clusters/
```

Example

```
curl -k -X POST -H "x-auth-token: $TOKEN" -d \
'{
  "provider": "17d7d949-cf95-4676-80a7-ae3d773dc3b0",
  "vpc_sizing": {
    "subnet": "10.20.0.0\/16",
    "public_subnets": [
      "10.20.1.0\/24",
      "10.20.2.0\/24",
      "10.20.3.0\/24"
    ],
    "private_subnets": [
      "10.20.4.0\/24",
      "10.20.5.0\/24",
      "10.20.6.0\/24"
    ]
  },
  "region": "us-west-2",
  "type": "eks",
  "ami": "ami-09677889326e51ea1",
  "instance_type": "t2.small",
  "worker_count": 1,
  "access_role_arn":
"arn:aws:iam::123456789123:role\/KubernetesAdmin",
  "name": "selvi_eks_1",
  "ssh_keys": [
    "ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAIHdSrKkWhwED6awk9sjegF0dgcKnotmyrealkey
selvik@SELVIK-M-C1DM",
    "another_dummy"
  ]
}' https://10.20.30.40/v3/clusters/
```

Response

```
 {
   "id": "094c1544-58e5-46cf-8a3f-94de81f35574",
   "type": "eks",
   "name": " selvi_eks_1",
```

```
  "provider": "17d7d949-cf95-4676-80a7-ae3d773dc3b0",
  "region": "us-west-2",
  "status": "CREATING",
  "status_detail": null,
  "access_role_arn":
"arn:aws:iam::123456789123:role\/KubernetesAdmin",
  "kubeconfig": null,
  "vpc_sizing": {
    "subnet": "10.20.0.0\/16",
    "public_subnets": [
      "10.20.1.0\/24",
      "10.20.2.0\/24",
      "10.20.3.0\/24"
    ],
    "private_subnets": [
      "10.20.4.0\/24",
      "10.20.5.0\/24",
      "10.20.6.0\/24"
    ]
  },
  "ami": "ami-09677889326e51ea1",
  "instance_type": "t2.small",
  "ssh_key_name": "",
  "worker_count": 1,
  "vpc_id": null
}
```


Note: The API returns the values immediately, and the status is indicated as *CREATING*.

6.8 Retrieving all clusters

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/clusters
```

Example

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://10.20.30.40/v3/clusters
```

Response


```
[
    {
        "id": "35de61b9-5175-40d5-bea3-1b058fb22c45",
        "type": "vsphere",
        "name": "demo-cluster",
        "provider": "b54efda6-78c7-4418-9b89-955da6585984",
        "status": "READY",
        "spec": {
            "name": "demo-cluster",
            "type": "vsphere",
            "kubernetes_version": "1.13.5",
            "ip_allocation_method": "ccpnet",
            "master_vip": "",
            "load_balancer_num": 1,
            "subnet_id": "ea042d99-9c69-43f8-ac44-
ab0b9c843dcf",
            "ntp_pools": [],
            "ntp_servers": [],
            "root_ca_registries": [],
```

```
            "self_signed_registries": {},
            "vsphere_infra": {
                "cluster": "HX3",
                "datacenter": "HX3",
                "datastore": "hx3-data",
                "folder": "",
                "guestOS": "",
                "hostSystem": "",
                "networks": [
                    "VLAN 1161 - 10.10.100.0 - 22"
                ],
                "resource_pool": ""
            },
            "master_group": {
                "gpus": [],
                "labels": null,
                "name": "master-group",
                "size": 1,
                "taints": null,
                "template": "ccp-tenant-image-1.16.3-
6.0.0.ova",
                "vcpus": 2,
                "memory_mb": 16384,
                "ssh_key": "ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAINhzxv/Zy/uHF567CqR1o71Z7Wo4Wk/3+H5APXv
lcRM6",
                "ssh_user": "ccpuser",
                "nodes": [
                    {
                        "name": "demo-cluster-0-master-0",
                        "status": "ERROR",
                        "phase": "Running",
                        "private_ip": "10.10.100.109",
                        "public_ip": "10.10.100.109"
                    }
                ]
            },
            "node_groups": [
                {
                    "gpus": [],
                    "labels": null,
                    "name": "node-group",
                    "size": 1,
                    "taints": null,
                    "template": "ccp-tenant-image-1.16.3-
6.0.0.ova",

                    "vcpus": 2,
                    "memory_mb": 16384,
                    "ssh_key": "ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAINhzxv/Zy/uHF567CqR1o71Z7Wo4Wk/3+",
                    "ssh_user": "ccpuser",
                    "nodes": [
                        {
                            "name": "demo-cluster-1-node-gr-0",
                            "status": "READY",
                            "phase": "Running",
                            "private_ip": "10.10.100.108",
                            "public_ip": "10.10.100.108"
                        }
                    ]
```

```
                }
            ],
            "network_plugin_profile": {
                "details": {
                    "typhaReplicas": "1",
                    "pod_cidr": "192.168.0.0/16",
                    "ssh_user": "ccpuser"
                },
                "name": "calico"
            },
            "kubernetes_config_secret": "demo-cluster-
kubeconfig",
            "ingress_as_lb": true,
            "nginx_ingress_class": "",
            "etcd_encrypted": false,
            "skip_management": null,
            "docker_no_proxy": []
        },
        "kubeconfig": "…",
        "kubernetes_version": "1.13.5",
        "kubernetes_config_secret": null,
        "ip_allocation_method": "ccpnet",
        "master_vip": "",
        "load_balancer_num": 1,
        "subnet_id": "ea042d99-9c69-43f8-ac44-ab0b9c843dcf",
        "ntp_pools": [],
        "ntp_servers": [],
        "root_ca_registries": [],
        "self_signed_registries": {},
        "insecure_registries": [],
        "docker_http_proxy": "",
        "docker_https_proxy": "",
        "vsphere_infra": {
            "datacenter": "HX3",
            "datastore": "hx3-data",
            "networks": [
                "VLAN 1161 - 10.10.100.0 - 22"
            ],
            "cluster": "HX3",
            "resource_pool": "",
            "folder": ""
        },
        "master_group": {
            "name": "master-group",
            "size": 1,
            "template": "ccp-tenant-image-1.16.3-6.0.0.ova",
            "vcpus": 2,
            "memory_mb": 16384,
            "gpus": [],
            "ssh_user": "ccpuser",
            "ssh_key": "ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAINhzxv/Zy/uHF567CqR1o71Z7Wo4Wk/3+H5APXv
lcRM6
            "nodes": [
                {
                    "name": "demo-cluster-0-master-0",
                    "status": "ERROR",
                    "phase": "Running",
                    "private_ip": "10.10.100.109",
                    "public_ip": "10.10.100.109"
                }
```

```
                ]
            },
            "node_groups": [
                {
                    "name": "node-group",
                    "size": 1,
                    "template": "ccp-tenant-image-1.16.3-
    6.0.0.ova”,
                    "vcpus": 2,
                    "memory_mb": 16384,
                    "gpus": [],
                    "ssh_user": "ccpuser",
                    "ssh_key": "ssh-ed25519
    AAAAC3NzaC1lZDI1NTE5AAAAINhzxv/Zy/uHF567CqR1o71Z7Wo4Wk/3+H5APXv
    lcRM6",
                    "nodes": [
                        {
                            "name": "demo-cluster-1-node-gr-0",
                            "status": "READY",
                            "phase": "Running",
                            "private_ip": "10.10.100.108",
                            "public_ip": "10.10.100.108"
                        }
                    ]
                }
            ],
            "network_plugin_profile": {
                "details": {
                    "typhaReplicas": "1",
                    "pod_cidr": "192.168.0.0/16",
                    "ssh_user": "ccpuser"
                },
                "name": "calico"
            },
            "ingress_as_lb": true,
            "nginx_ingress_class": "",
            "etcd_encrypted": false,
            "skip_management": false,
            "docker_no_proxy": [],
            "routable_cidr": null,
            "image_prefix": null,
            "aci_profile": null
        }
    ]
```


6.9 Retrieving Specific Clusters

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/clusters/<your_cluster_uuid>/
```

Example

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/clusters/35de61b9-5175-40d5-bea3-1b058fb22c45/
```

Response


```
    {
    "id": "35de61b9-5175-40d5-bea3-1b058fb22c45",
    "type": "vsphere",
    "name": "demo-cluster",
    "provider": "b54efda6-78c7-4418-9b89-955da6585984",
```

```
"status": "READY",
"spec": {
        "name": "demo-cluster",
    "type": "vsphere",
    "kubernetes_version": "1.13.5",
    "ip_allocation_method": "ccpnet",
    "master_vip": "",
    "load_balancer_num": 1,
    "subnet_id": "ea042d99-9c69-43f8-ac44-ab0b9c843dcf",
    "ntp_pools": [],
    "ntp_servers": [],
    "root_ca_registries": [],
    "self_signed_registries": {},
    "vsphere_infra": {
        "cluster": "HX3",
        "datacenter": "HX3",
        "datastore": "hx3-data",
        "folder": "",
        "guestOS": "",
        "hostSystem": "",
        "networks": [
            "VLAN 1161 - 10.10.100.0 - 22"
        ],
        "resource_pool": ""
    },
    "master_group": {
        "gpus": [],
        "labels": null,
        "name": "master-group",
        "size": 1,
        "taints": null,
        "template": "ccp-tenant-image-1.16.3-ubuntu18-6.0.0.ova",
        …
"kubernetes_version": "1.13.5",
"kubernetes_config_secret": null,
"ip_allocation_method": "ccpnet",
"master_vip": "",
"load_balancer_num": 1,
"subnet_id": "ea042d99-9c69-43f8-ac44-ab0b9c843dcf",
"ntp_pools": [],
"ntp_servers": [],
"root_ca_registries": [],
"self_signed_registries": {},
"insecure_registries": [],
"docker_http_proxy": "",
"docker_https_proxy": "",
"vsphere_infra": {
    "datacenter": "HX3",
    "datastore": "hx3-data",
    "networks": [
        "VLAN 1161 - 10.10.100.0 - 22"
    ],
    "cluster": "HX3",
    "resource_pool": "",
    "folder": ""
},
"master_group": {
    "name": "master-group",
    "size": 1,
    "template": "ccp-tenant-image-1.16.3-ubuntu18-6.0.0.ova",
    "vcpus": 2,
```

```
        "memory_mb": 16384,
        "gpus": [],
        "ssh_user": "ccpuser",
        "ssh_key": "ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAINhzxv/Zy/uHF567CqR1o71Z7Wo4Wk/3+H5APXvlcRM6"
,
        "nodes": [
            {
                "name": "demo-cluster-0-master-0",
                "status": "ERROR",
                "phase": "Running",
                "private_ip": "10.10.100.109",
                "public_ip": "10.10.100.109"
            }
        ]
    },
    "node_groups": [
        {
            "name": "node-group",
            "size": 1,
            "template": "ccp-tenant-image-1.16.3-ubuntu18-6.0.0.ova",
            "vcpus": 2,
            "memory_mb": 16384,
            "gpus": [],
            "ssh_user": "ccpuser",
            "ssh_key": "ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAINhzxv/Zy/uHF567CqR1o71Z7Wo4Wk/3+H5APXvlcRM6"
,
            "nodes": [
                {
                    "name": "demo-cluster-1-node-gr-0",
                    "status": "READY",
                    "phase": "Running",
                    "private_ip": "10.10.100.108",
                    "public_ip": "10.10.100.108"
                }
            ]
        }
    ],
    "network_plugin_profile": {
        "details": {
            "typhaReplicas": "1",
            "pod_cidr": "192.168.0.0/16",
            "ssh_user": "ccpuser"
        },
        "name": "calico"
    },
    "ingress_as_lb": true,
    "nginx_ingress_class": "",
    "etcd_encrypted": false,
    "skip_management": false,
    "docker_no_proxy": [],
    "routable_cidr": null,
    "image_prefix": null,
    "aci_profile": null
     }
```


6.10 Deleting clusters

Command

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://$CCP/v3/clusters/cluster_uuid/
```

Example

```
curl -k -X DELETE -H "x-auth-token: $TOKEN"
https://$CCP/v3/clusters/ 35de61b9-5175-40d5-bea3-
1b058fb22c45/
```

6.11 Creating ACI Profile

```
 curl -XPOST -d '{
"name": "example-aci-profile5",
"apic_username": "username",
"apic_password": "password",
"aci_tenant": "aci_tenant",
"apic_hosts": "apic_hosts",
"aci_vmm_domain_name": "aci_vmm_domain_name",
"vrf_name": "vrf_name",
"l3_outside_policy_name": "l3_outside_policy_name",
"l3_outside_network_name": "l3_outside_network_name",
"aaep_name": "aaep_name",
"nameservers": "nameservers",
"aci_infra_vlan_id": 1234,
"node_vlan_start": 1,
"node_vlan_end": 100,
"multicast_range": "10.0.0.0\/16",
"service_subnet_start": "20.15.1.1\/16",
"pod_subnet_start": "10.2.0.0\/16",
"aci_profile_name": "asdf"
 }' -H 'content-type: application/json' https://$CCP/v3/aci-
profiles/
```

6.12 Creating ACI-enabled vSphere Cluster

```
curl -d '{"type":"vsphere", "provider": "276ed502-1b95-4329-
859e-12289d37953b", "name":"example-vsphere-cluster",
"kubernetes_version":"1.12.7",
"vsphere_infra":{"folder":"yeet", "datacenter":"foo",
"datastore":"foo", "networks":["foo"], "cluster":"foo",
"resource_pool":"ayyy"},
"master_group":{"name":"foo","size":1234},
"network_plugin_profile":{"details":{"pod_cidr":"10.0.0.0/24"}}
, "node_groups":[], "ip_allocation_method":"ccpnet"
, "master_vip":"1.2.3.4","skip_management":true,
"docker_no_proxy":["foo","bar"],
"load_balancer_num":3,"subnet_id":"5c2f63d5-5821-439f-acd5-
fb8ddd559cac","aci_profile":"aadb0435-775d-445d-9bac-
37dfcad1eb89", "routable_cidr":"10.10.123.1/
24", "image_prefix":"this is not validated yet"}'
https://$CCP/v3/clusters/
```

6.13 Updating ACI Profile

Command

```
curl -XPATCH -d '{"aaep_name":"new_aaep_name"}'
https://$CCP/v3/aci-profiles/aadb0435-775d-445d-9bac-
37dfcad1eb89/
```

Note: The cluster has to be PATCHed to pick up the new ACI details. This is by design.

Example

```
curl -s -XPATCH -d '{}' https://$CCP/v3/clusters/d7dc05c7-78a6-4ff7-9657-1ac48ee09dcb/
```

6.14 Deleting ACI Profile

Example

```
curl -XDELETE https://10.20.30.40/v3/aci-profiles/aadb0435-775d-445d-9bac-37dfcad1eb89/
```

6.15 Listing Addons

Helm charts can be managed using the addons API. Addons are installed on a tenant cluster. For more information on creating tenant clusters, see Creating vSphere Tenant Clusters.

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/clusters/<your_cluster_uuid>/addons/
```

Example

```
export CLUSTER=35de61b9-5175-40d5-bea3-1b058fb22c45
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://10.20.30.40/v3/clusters/$CLUSTER/addons/
```

Response


```
{
    "count": 2,
    "next": null,
    "previous": null,
    "results": [
        {
            "name": "ccp-monitor",
            "namespace": "default",
            "overrides": "",
            "overrideFiles": [],
            "status": {},
            "url": "/opt/ccp/charts/ccp-monitor.tgz"
        },
        {
            "name": "metrics",
            "namespace": "default",
            "overrides": "",
            "overrideFiles": [],
            "status": {},
            "url": "metrics-server"
        }
    ]
}
```

6.16 Listing Catalog

Built-in addons can be listed using the catalog. The catalog lists the addons that can be installed on a tenant cluster. For more information on creating tenant clusters, see Creating vSphere Tenant Clusters.

Command

```
curl -k -X GET -H "X-Auth-Token":"$TOKEN"
https://$CCP/v3/clusters/<your_cluster_uuid>/catalog/
```

Example

```
export CLUSTER=35de61b9-5175-40d5-bea3-1b058fb22c45
curl -k -X GET -H "X-Auth-Token":"$TOKEN" https://10.20.30.40
/v3/clusters/$CLUSTER/catalog/
```

Response


```
{
    "_ccp-monitor": {
        "displayName": "Monitoring",
        "name": "ccp-monitor",
        "namespace": "ccp",
        "description": "Monitoring",
        "url": "/opt/ccp/charts/ccp-monitor.tgz"
    },
    "_ccp-efk": {
        "displayName": "Logging",
        "name": "ccp-efk",
        "namespace": "ccp",
        "description": "Logging",
        "url": "/opt/ccp/charts/ccp-efk.tgz"
    },
    "_ccp-kubernetes-dashboard": {
        "displayName": "Dashboard",
        "name": "kubernetes-dashboard",
        "namespace": "ccp",
        "description": "Dashboard",
        "url": "/opt/ccp/charts/kubernetes-dashboard.tgz",
        "overrideFiles": [
            "/opt/ccp/charts/kubernetes-dashboard.yaml"
        ],
    }
}
```


6.17 Adding Addons

Addons listed in the catalog can be installed on a tenant cluster. For more information on creating tenant clusters, see Creating vSphere Tenant Clusters.

Command

```
curl -k -v -H "Content-Type:application/json" -H "X-Auth-Token:$TOKEN"
https://$CCP/v3/clusters/$CLUSTER/addons/ -d '{"name":"addon_name", "url": "addn_url"}'
```

For built-in add-ons, the response for an addon for the /catalog listing can be used as payload for the addon creation. The payload from the catalog also includes the namespace into which the addons are installed.

Example

```
curl -k -H "Content-Type:application/json" -X POST -H "X-Auth-
Token":"$TOKEN" https://$CCP/v3/clusters/$CLUSTER/addons/ -d
'{"name": "ccp-monitor",
```

```
            "displayName": "Monitoring",
            "namespace": "ccp",
            "description": "Monitoring",
            "url": "/opt/ccp/charts/ccp-monitor.tgz"}'
```

Response

```
{
    "name": "ccp-monitor",
    "namespace": "ccp",
    "url": "/opt/ccp/charts/ccp-monitor.tgz"
}
```

6.18 Adding Addons with Overrides

For example, consider the following override:

```
prometheus:
  nodeExporter:
    enabled: false
```

This override translates to:

```
{"overrides": "prometheus:\n  nodeExporter:\n    enabled: false"}
```

```
curl -k -v -H "Content-Type:application/json" -H "X-Auth-
Token:$TOKEN" https://$CCP/v3/clusters/$CLUSTER/addons/ -d
'{
  "name": "ccp-monitor",
  "url": "_ccp-monitor",
  "namespace": "ccp",
  "overrides": "prometheus:\n  nodeExporter:\n    enabled:
false"
}'
```

```
curl -k -v -H "Content-Type:application/json" -H "X-Auth-
Token:$TOKEN" http://$CCP/v3/clusters/$CLUSTER/addons/ -d '{
  "name": "ccp-monitor",
  "url": "_ccp-monitor",
  "namespace": "ccp",
  "overrides": "hx:\n  url: 10.10.51.9\n  token:
eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJ1c2Vycy9hZG1pbmlzdHJhdG9yQHZzcG
hlcmUubG9jYWwiLCJ1c2VyIjoiYWRtaW5pc3RyYXRvckB2c3BoZXJlLmxvY2FsI
iwibGFiZWxzIjp7Im5hbWUiOiJhYmkiLCJjb21wYW55IjoiY2lzY28ifSwic2Nv
cGUiOiJSRUFELE1PRElGWSIsImlzc3VlZEF0IjoxNTY1MjQ5OTY4NjM0LCJ0b2t
lbkxpZmVUaW1lIjotMX0.DkQjyBqSO8py3625ki9X3na8vLNS2QDQUC5SOlVHL9
M"
}'
```

```
curl -k -v \
  -H "Content-Type:application/json" \
  -H "X-Auth-Token:$TOKEN" \
  https://$CCP/v3/clusters/$CLUSTER/addons/ \
  -d
'{
  "name": "ccp-monitor",
  "url": "\/opt\/ccp\/charts\/ccp-monitor.tgz",
  "namespace": "ccp",
```

```
  "overrides": "prometheus:\n  server:\n    persistentVolume:\n
size: 16Gi\n    extraArgs:\n      storage.tsdb.size: 8Gi\n
storage.tsdb.retention.size: 2Gi"
}'
```

6.19 Deleting Addons

Command

```
curl -k -v -X DELETE -H "X-Auth-Token:$TOKEN"
https://$CCP/v3/clusters/$CLUSTER/addons/<addon-name>/
```

Example

```
curl -k -X DELETE -H "Content-Type:application/json" -H "X-
Auth-Token":"$TOKEN"
https://$CCP/v3/clusters/$CLUSTER/addons/metrics/
```

Response

```
None
```

6.20 Adding Node Pools

Procedure

1. Log in to the Cisco Container Platform API on the control plane using the `v3/login` endpoint and get an authentication token.
   For more information, see Logging in to Cisco Container Platform.
2. Get the UUID of the cluster to which you want to add the node pool.
3. Create a request.json file with the following code:

```
{
  "name": "foo-node-pool",
  "size": 5,
  "vcpus": 2,
  "memory_mb": 16384,
  "gpus": [],
        "kubernetes_version": "1.16.3",
        "template": "ccp-tenant-image-1.16.3-ubuntu18-
    6.0.0.ova"
}
```

4. Make a request to the API to create the node pool and include the authentication token header.

   Command

   ```
   curl -H "content-type: application/json" --data
   @request.json https://$CCP/v3/clusters/<CLUSTER-
   UUID>/node-groups/
   ```

   Example

   ```
   curl -H "content-type: application/json" --data
   @request.json
   https://$CCP/v3/clusters/2b011bdb-ceb7-486d-be02-
   c5bee1a42a95/node-groups/
   ```

   Response

   ```
   {
       "name": "foo-node-pool",
       "size": 5,
       "vcpus": 2,
       "memory_mb": 16384,
   ```

```
        "gpus": [],
        "nodes": [],
        "kubernetes_version": "1.16.3"
    }
```

6.21 Getting List of Node Pools

Procedure

1. Log in to the Cisco Container Platform API on the control plane using the `v3/login` endpoint and get an authentication token.
   For more information, see Logging in to Cisco Container Platform.
2. Get the UUID of the cluster that contains the node pools.
3. Get the list of node pools in the cluster.
   `/v3/<CLUSTER-UUID>/node-groups/ endpoint`
4. Make a request to the API to list node pools in a cluster.

   Command

   ```
   curl https://$CCP/v3/clusters/<CLUSTER-UUID>/node-groups/
   ```

   Example

   ```
   curl https://$CCP/v3/clusters/2b011bdb-ceb7-486d-be02-
   c5bee1a42a95/node-groups/
   ```

   Response

   ```
   {
       "count": 1,
       "next": null,
       "previous": null,
       "results": [
           {
               "name": "foo-node-pool",
               "size": 5,
               "vcpus": 2,
               "memory_mb": 16384,
               "gpus": [],
               "nodes": [],
               "kubernetes_version": "1.16.3"
                }
            ]

   }
   ```

6.22 Modifying Node Pools

Procedure

1. Log in to the Cisco Container Platform API on the control plane using the `v3/login` endpoint and get an authentication token.
   For more information, see Logging in to Cisco Container Platform.
2. Get the UUID of the cluster that contains the node pool that you want to modify.
3. Get the list of node pools in the cluster.
   `/v3/<CLUSTER-UUID>/node-groups/ endpoint`

4. Note down the name of node pool that you want to modify.
5. Create a request.json file with the necessary modifications.

   Example

```
{
  "name": "foo-node-pool",
  "size": <NEW-SIZE>,
  "vcpus": 2,
  "memory_mb": 16384,
  "gpus": [],
  "kubernetes_version": "1.16.3",
  "template": "ccp-tenant-image-1.16.3-ubuntu18-
6.0.0.ova"
}
```

   Note: You cannot modify the name of the node pool. Modifications to the Kubernetes_version and template fields will trigger an upgrade to the node pool. Modifications to vcpus, memory_mb and gpus fields will not change the current node configurations in the node pool and will only take effect when the node pool is either upgraded or scaled.

6. Make a PATCH request to the API to modify the node pool that has the authentication token header.

   Command

```
curl -XPATCH -H "content-type: application/json" --data
@request.json https://$CCP/v3/clusters/<CLUSTER-
UUID>/node-pools/<NAME>
```

   Example

```
Curl -XPATCH -H "content-type: application/json"
--data @request.json
https://$CCP/v3/clusters/2b011bdb-ceb7-486d-be02-
c5bee1a42a95/node-groups/foo-node-pool
```

   Response

```
{
    "name": "foo-node-pool",
    "size": 10,
    "vcpus": 2,
    "memory_mb": 16384,
    "gpus": [],
    "nodes": [],
    "kubernetes_version": "1.16.3"
}
```

6.23 Deleting Node Pools

1. Log in to the Cisco Container Platform API on the control plane using the `v3/login` endpoint and get an authentication token.
   For more information, see Logging in to Cisco Container Platform.
2. Get the UUID of the cluster that contains the node pool that you want to modify.
3. Get the list of node pools in the cluster.
   `/v3/<CLUSTER-UUID>/node-groups/ endpoint`
4. Note down the name of node pool that you want to delete.

5. Make a DELETE request to the API to delete the node pool that has the authentication token header.

   Command

   ```
   curl -XDELETE https://$CCP/v3/clusters/<CLUSTER-UUID>/node-groups/<NAME>
   ```

   Example

   ```
   Curl -XDELETE https://$CCP/v3/clusters/2b011bdb-ceb7-486d-be02-c5bee1a42a95/node-groups/foo-node-pool
   ```

   Response

   ```
   None
   ```

7 Cisco Container Platform API Reference

/static/openapi.yml Explore

CCP v3 API 6.0.0 OAS3

/static/openapi.yml

This is the v3 API as of the CCP 6.0.0 release.

Servers
https://ccp-api/v3

Authorize

ACI Profiles

GET /aci-profiles/ List all ACI Profiles

POST /aci-profiles/ Create an ACI Profile

Parameters Try it out

No parameters

Request body application/json

Create ACI Profile properties

Example Value **Schema**

AciProfile {

```
control_plane_contract_name* string
nameservers*                    [...]
node_vlan_start                 integer
                                minimum: 1
                                maximum: 4094
node_vlan_end                   integer
                                minimum: 1
                                maximum: 4094
multicast_range                 string
service_subnet_start            string
pod_subnet_start                string
name*                           string
apic_hosts*                     string
apic_username*                  string
apic_password*                  string
aci_vmm_domain_name*            string
aci_infra_vlan_id*              integer
                                minimum: 1
                                maximum: 4094
vrf_name*                       string
l3_outside_policy_name*         string
l3_outside_network_name*        string
aaep_name*                      string
aci_tenant*                     string
}
```

Responses

Code	Description	Links

Code	Description	Links
201	ACI Profile creation response Media type application/json Controls `Accept` header. Example Value **Schema** **AciProfile** {	*No links*

```
    control_plane_contract_name* string
    nameservers*
                                    [...]
    node_vlan_start             integer
                                minimum: 1
                                maximum: 4094
    node_vlan_end               integer
                                minimum: 1
                                maximum: 4094
    multicast_range             string
    service_subnet_start        string
    pod_subnet_start            string
    name*                       string
    apic_hosts*                 string
    apic_username*              string
    apic_password*              string
    aci_vmm_domain_name*        string
    aci_infra_vlan_id*          integer
                                minimum: 1
                                maximum: 4094
    vrf_name*                   string
    l3_outside_policy_name*     string
    l3_outside_network_name*    string
    aaep_name*                  string
    aci_tenant*                 string
}
```

400	Bad request Media type application/json Example Value **Schema** {	*No links*

```
}
```

GET `/aci-profiles/{aciProfileId}/` Info for a specific ACI Profile

Parameters Try it out

Name	Description
aciProfileId * required `string` *(path)*	The id of the ACI Profile to retrieve aciProfileId - The id of the ACI Profile to retrie

Responses

Code	Description	Links
200	ACI Profile response Media type application/json Controls Accept header. Example Value **Schema** **AciProfile** {	*No links*

```
    control_plane_contract_name* string
    nameservers*                    [...]
    node_vlan_start             integer
                                minimum: 1
                                maximum: 4094
    node_vlan_end               integer
                                minimum: 1
                                maximum: 4094
    multicast_range             string
    service_subnet_start        string
    pod_subnet_start            string
    name*                       string
    apic_hosts*                 string
    apic_username*              string
    apic_password*              string
    aci_vmm_domain_name*        string
    aci_infra_vlan_id*          integer
                                minimum: 1
                                maximum: 4094
    vrf_name*                   string
    l3_outside_policy_name*     string
    l3_outside_network_name*    string
    aaep_name*                  string
    aci_tenant*                 string
}
```

404	Resource not found	*No links*

PATCH /aci-profiles/{aciProfileId}/ Update a specific ACI Profile

Parameters

Try it out

Name	Description
aciProfileId * required string *(path)*	The id of the ACI Profile to update aciProfileId - The id of the ACI Profile to upda

Request body application/json

Update ACI Profile properties

Example Value **Schema**

AciProfile {

control_plane_contract_name*	string	
nameservers*		[...]
node_vlan_start	integer	minimum: 1 maximum: 4094
node_vlan_end	integer	minimum: 1 maximum: 4094
multicast_range	string	
service_subnet_start	string	
pod_subnet_start	string	
name*	string	
apic_hosts*	string	
apic_username*	string	
apic_password*	string	
aci_vmm_domain_name*	string	
aci_infra_vlan_id*	integer	minimum: 1 maximum: 4094
vrf_name*	string	
l3_outside_policy_name*	string	
l3_outside_network_name*	string	
aaep_name*	string	
aci_tenant*	string	

}

Responses

Code	Description	Links

Code	Description	Links
200	ACI Profile response Media type application/json Controls `Accept` header. Example Value **Schema** **AciProfile** {	*No links*

```
    control_plane_contract_name* string
    nameservers*
                                    [...]
    node_vlan_start             integer
                                minimum: 1
                                maximum: 4094
    node_vlan_end               integer
                                minimum: 1
                                maximum: 4094
    multicast_range             string
    service_subnet_start        string
    pod_subnet_start            string
    name*                       string
    apic_hosts*                 string
    apic_username*              string
    apic_password*              string
    aci_vmm_domain_name*        string
    aci_infra_vlan_id*          integer
                                minimum: 1
                                maximum: 4094
    vrf_name*                   string
    l3_outside_policy_name*     string
    l3_outside_network_name*    string
    aaep_name*                  string
    aci_tenant*                 string
}
```

400	Bad request Media type application/json Example Value **Schema**	*No links*

```
    {
}
```

404	Resource not found	*No links*

DELETE `/aci-profiles/{aciProfileId}/` Delete a specific ACI Profile

Parameters Try it out

Name	Description

Name	Description
aciProfileId * required `string` *(path)*	The id of the ACI Profile to delete aciProfileId - The id of the ACI Profile to delet

Responses

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

Addons

GET `/clusters/{clusterId}/addons/` List all addons for the cluster

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster

Responses

Code	Description	Links

Code	Description	Links
200	An array of cluster addons Media type application/json Controls `Accept` header. Example Value **Schema**	*No links*

```
[Addon {
name*                string
namespace            string
                     default: default
overrides            string
overrideFiles
                         [...]
status
                         {...}
url                  string
}]
```

POST `/clusters/{clusterId}/addons/` Create a cluster addon

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster

Request body application/json

Create cluster addon properties

Example Value **Schema**

```
Addon {
    name*            string
    namespace        string
                     default: default
    overrides        string
    overrideFiles
                         [...]
    status
                         {...}
    url              string
}
```

Responses

Code	Description	Links

201	Cluster addon creation response
	
	Media type
	application/json
	Controls Accept header.
	
	Example Value Schema
	
	Addon {
	name* string
	namespace string
	default: default
	overrides string
	overrideFiles [...]
	status {...}
	url string
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value Schema
	
	{
	}
		No links

GET `/clusters/{clusterId}/addons/{addonId}/` Info for a specific cluster addon

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
addonId * required `string` *(path)*	The id of the addon addonId - The id of the addon

Responses

Code	Description	Links

200	Cluster addon response
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	Addon {
	name* **string**
	namespace **string**
	default: default
	overrides **string**
	overrideFiles [...]
	status {...}
	url **string**
	}
		No links

404	Resource not found	*No links*

PATCH `/clusters/{clusterId}/addons/{addonId}/` Update a specific cluster addon

Parameters Try it out

Name	Description
clusterId * required **string** ***(path)***	The id of the cluster clusterId - The id of the cluster
addonId * required **string** ***(path)***	The id of the addon addonId - The id of the addon

Request body **application/json**

Update cluster addon properties

Example Value **Schema**

Addon {

name*	string
namespace	string *default: default*
overrides	string
overrideFiles	[...]
status	{...}
url	string

}

Responses

Code	Description	Links
200	Cluster addon response Media type **application/json** Controls `Accept` header. Example Value **Schema**	*No links*

AciProfile {

control_plane_contract_name*	string
nameservers*	[...]
node_vlan_start	integer *minimum: 1* *maximum: 4094*
node_vlan_end	integer *minimum: 1* *maximum: 4094*
multicast_range	string
service_subnet_start	string
pod_subnet_start	string
name*	string
apic_hosts*	string
apic_username*	string
apic_password*	string
aci_vmm_domain_name*	string
aci_infra_vlan_id*	integer *minimum: 1* *maximum: 4094*
vrf_name*	string
l3_outside_policy_name*	string
l3_outside_network_name*	string
aaep_name*	string
aci_tenant*	string

}

Code	Description	Links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

404	Resource not found	*No links*

DELETE `/clusters/{clusterId}/addons/{addonId}/` Delete a specific cluster addon

Parameters Try it out

Name	Description

clusterId * required
`string`
`(path)`
	The id of the cluster
	
	clusterId - The id of the cluster

addonId * required
`string`
`(path)`
	The id of the addon
	
	addonId - The id of the addon

Responses

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

Clusters

GET `/clusters/` List all clusters

Parameters Try it out

No parameters

Responses

Code	Description	Links
200	An array of Clusters Media type application/json Controls `Accept` header. Example Value **Schema** **Clusters** `[ {...}]`	*No links*

POST `/clusters/` Create a cluster

Parameters Try it out

No parameters

Request body application/json

Create cluster properties

Example Value **Schema**

BaseCluster

```
{
  name*          string
  provider*      string
  type*          string
}
```

Responses

Code	Description	Links

Code	Description	Links
202	Cluster creation response Media type application/json Controls `Accept` header. Example Value **Schema** **Clusters** `[ { anyOf ->` **AKSCluster** `{...}` **EKSCluster** `{...}` **OpenstackCluster** `{...}` **VsphereCluster** `{...} }]`	*No links*
400	Bad request Media type application/json Example Value **Schema** `{ }`	*No links*

GET `/clusters/{clusterId}/` Info for a specific cluster

Parameters Try it out

Name	Description
clusterId * required `string` *`(path)`*	The id of the cluster to retrieve clusterId - The id of the cluster to retrieve

Responses

Code	Description	Links

Code	Description	Links
200	Returns one of our Cluster types Media type **application/json** Controls `Accept` header. Example Value **Schema** `{ oneOf ->` **AKSCluster** `{...}` **EKSCluster** `{...}` **OpenstackCluster** `{...}` **VsphereCluster** `{...}` `}`	*No links*
404	Resource not found	*No links*

PATCH `/clusters/{clusterId}/` Update a specific cluster

Parameters Try it out

Name	Description
clusterId * required `string` ***(path)***	The id of the cluster to update clusterId - The id of the cluster to update

Request body **application/json**

Update cluster properties

Example Value **Schema**

BaseCluster {
- **name*** string
- **provider*** string
- **type*** string

}

Responses

Code	Description	Links

Code	Description	Links
200	Returns one of our Cluster types Media type application/json Controls `Accept` header. Example Value **Schema** `{ oneOf ->` **AKSCluster** `{...}` **EKSCluster** `{...}` **OpenstackCluster** `{...}` **VsphereCluster** `{...}` `}`	*No links*
400	Bad request Media type application/json Example Value **Schema** `{ }`	*No links*
404	Resource not found	*No links*

DELETE `/clusters/{clusterId}/` Delete a specific cluster

Parameters Try it out

Name	Description
clusterId * required `string` *`(path)`*	The id of the cluster to delete clusterId - The id of the cluster to delete

Responses

Code	Description	Links

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

GET `/clusters/{clusterId}/addons/` List all addons for the cluster

Parameters Try it out

Name	Description
clusterId * required `string` *`(path)`*	The id of the cluster clusterId - The id of the cluster

Responses

Code	Description	Links
200	An array of cluster addons Media type application/json Controls `Accept` header. Example Value **Schema** [**Addon** `{...}`]	*No links*

POST `/clusters/{clusterId}/addons/` Create a cluster addon

Parameters Try it out

Name	Description
clusterId * required `string` *`(path)`*	The id of the cluster clusterId - The id of the cluster

Request body

application/json

Create cluster addon properties

Example Value **Schema**

```
Addon {
    name*                   string
    namespace               string
                            default: default
    overrides               string
    overrideFiles
                                [...]
    status
                                {...}
    url                     string
}
```

Responses

Code	Description	Links

201	Cluster addon creation response
	
	Media type
	application/json
	Controls Accept header.
	
	Example Value **Schema**
	
	Addon {
	name* string
	namespace string
	default: default
	overrides string
	overrideFiles
	[...]
	status
	{...}
	url string
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

GET `/clusters/{clusterId}/addons/{addonId}/` Info for a specific cluster addon

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
addonId * required `string` *(path)*	The id of the addon addonId - The id of the addon

Responses

Code	Description	Links
200	Cluster addon response Media type: application/json Controls Accept header. Example Value **Schema** **Addon** { name* string; namespace string default: default; overrides string; overrideFiles [...]; status {...}; url string }	*No links*
404	Resource not found	*No links*

PATCH `/clusters/{clusterId}/addons/{addonId}/` Update a specific cluster addon

Parameters Try it out

Name	Description

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
addonId * required `string` *(path)*	The id of the addon addonId - The id of the addon

Request body **application/json**

Update cluster addon properties

Example Value **Schema**

Addon

```
{
    name*                string
    namespace            string
                         default: default
    overrides            string
    overrideFiles
                             [...]
    status
                             {...}
    url                  string
}
```

Responses

Code	Description	Links

Code	Description	Links
200	Cluster addon response Media type application/json Controls `Accept` header. Example Value **Schema** **AciProfile** {	*No links*

```
  control_plane_contract_name* string
  nameservers*                 [...]
  node_vlan_start              integer
                               minimum: 1
                               maximum: 4094
  node_vlan_end                integer
                               minimum: 1
                               maximum: 4094
  multicast_range              string
  service_subnet_start         string
  pod_subnet_start             string
  name*                        string
  apic_hosts*                  string
  apic_username*               string
  apic_password*               string
  aci_vmm_domain_name*         string
  aci_infra_vlan_id*           integer
                               minimum: 1
                               maximum: 4094
  vrf_name*                    string
  l3_outside_policy_name*      string
  l3_outside_network_name*     string
  aaep_name*                   string
  aci_tenant*                  string
}
```

400	Bad request Media type application/json Example Value **Schema**	*No links*

```
    {
}
```

404	Resource not found	*No links*

DELETE `/clusters/{clusterId}/addons/{addonId}/` Delete a specific cluster addon

Parameters Try it out

Name	Description

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
addonId * required `string` *(path)*	The id of the addon addonId - The id of the addon

Responses

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

GET `/clusters/{clusterId}/node-groups/` List all cluster node groups

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster

Responses

Code	Description	Links

Code	Description	Links
200	An array of cluster node groups Media type application/json Controls `Accept` header. Example Value **Schema**	*No links*

```
[NodeGroup {
  name*                string
  size*                integer
                       minimum: 1
  template             string
  vcpus                integer
                       default: 2
  memory_mb            integer
                       default: 16384
  gpus                     [...]
  ssh_user             string
                       default:
  ssh_key              string
                       default:
  nodes                    [...]
  kubernetes_version*  string
}]
```

POST `/clusters/{clusterId}/node-groups/` Create a cluster node group

Parameters Try it out

Name	Description

clusterId * required
`string`
`(path)`
	The id of the cluster
	
	clusterId - The id of the cluster

Request body application/json

Create cluster node group properties

Example Value **Schema**

NodeGroup {

name*	string	
size*	integer	
	minimum: 1	
template	string	
vcpus	integer	
	default: 2	
memory_mb	integer	
	default: 16384	
gpus		
	[...]	
ssh_user	string	
	default:	
ssh_key	string	
	default:	
nodes		
	[...]	
kubernetes_version*	string	

}

Responses

Code	Description	Links

201	Cluster node group creation response
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	NodeGroup {
	name* string
	size* integer
	minimum: 1
	template string
	vcpus integer
	default: 2
	memory_mb integer
	default: 16384
	gpus
	[...]
	ssh_user string
	default:
	ssh_key string
	default:
	nodes
	[...]
	kubernetes_version* string
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

GET `/clusters/{clusterId}/node-groups/{nodeGroupId}/` Info for a speciifc cluster node groups

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
nodeGroupId * required `string` *(path)*	The id of the node group nodeGroupId - The id of the node group

Responses

Code	Description	Links
200	Cluster node group response Media type: application/json Controls Accept header. Example Value **Schema**	*No links*
404	Resource not found	*No links*

NodeGroup

```
{
  name*                string
  size*                integer
                       minimum: 1
  template             string
  vcpus                integer
                       default: 2
  memory_mb            integer
                       default: 16384
  gpus                     [...]
  ssh_user             string
                       default:
  ssh_key              string
                       default:
  nodes                    [...]
  kubernetes_version*  string
}
```

PATCH `/clusters/{clusterId}/node-groups/{nodeGroupId}/` Update a specific cluster node group

Parameters

Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
nodeGroupId * required `string` *(path)*	The id of the node group nodeGroupId - The id of the node group

Request body — application/json

Update cluster node group properties

Example Value **Schema**

NodeGroup

```
{
    name*                string
    size*                integer
                         minimum: 1
    template             string
    vcpus                integer
                         default: 2
    memory_mb            integer
                         default: 16384
    gpus
                             [...]
    ssh_user             string
                         default:
    ssh_key              string
                         default:
    nodes
                             [...]
    kubernetes_version*  string
}
```

Responses

Code	Description	Links

Code	Description	Links
200	Cluster node group response Media type application/json Controls `Accept` header. Example Value **Schema** **NodeGroup** {	*No links*

```
    name*                string
    size*                integer
                         minimum: 1
    template             string
    vcpus                integer
                         default: 2
    memory_mb            integer
                         default: 16384
    gpus
                             [...]
    ssh_user             string
                         default:
    ssh_key              string
                         default:
    nodes
                             [...]
    kubernetes_version*  string
}
```

400	Bad request Media type application/json Example Value **Schema**	*No links*

```
    {
}
```

404	Resource not found	*No links*

DELETE `/clusters/{clusterId}/node-groups/{nodeGroupId}/` Delete a specifc cluster node group

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster

Name	Description
nodeGroupId * required `string` *(path)*	The id of the node group nodeGroupId - The id of the node group

Responses

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

GET `/clusters/{clusterId}/catalog/` Get the catalog for a specific cluster

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster

Responses

Code	Description	Links

200	Successful catalog retrieval
	Media type
	application/json
	Controls `Accept` header.
	Example Value **Schema**
	{
	}
		No links

Code	Description	Links
404	Resource not found	*No links*

LDAP

GET `/ldap/groups/` List all LDAP Groups

Parameters Try it out

No parameters

Responses

Code	Description	Links

200	An array of LDAP Groups
	
	Media type: application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	`[LdapGroup {`
	`all_clusters_auth boolean`
	`readOnly: true`
	`clusters* {...}`
	`ldap_dn* string`
	`role* string`
	`}]`
		No links

POST `/ldap/groups/` Create an LDAP Group

Parameters Try it out

No parameters

Request body application/json

Create LDAP Group properties

Example Value **Schema**

LdapGroup {

all_clusters_auth	boolean *readOnly: true*
clusters*	{...}
ldap_dn*	string
role*	string

}

Responses

Code	Description	Links

201	LDAP Group creation response
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	LdapGroup {
	all_clusters_auth boolean *readOnly: true*
	clusters* {...}
	ldap_dn* string
	role* string
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

GET `/ldap/groups/{ldapGroupId}/` Info for a specific LDAP Group

Parameters

Try it out

Name	Description
ldapGroupId * required `string` *(path)*	The id of the LDAP Group to retrieve ldapGroupId - The id of the LDAP Group to re

Responses

Code	Description	Links
200	LDAP Group response Media type application/json Controls `Accept` header. Example Value **Schema** **LdapGroup** { all_clusters_auth boolean *readOnly: true*; clusters* {...}; ldap_dn* string; role* string }	*No links*
404	Resource not found	*No links*

PATCH `/ldap/groups/{ldapGroupId}/` Update a specific LDAP Group

Parameters

Try it out

Name	Description
ldapGroupId * required `string` *(path)*	The id of the LDAP Group to update ldapGroupId - The id of the LDAP Group to u

Request body application/json

Update LDAP Group properties

Example Value **Schema**

LdapGroup {
all_clusters_auth boolean *readOnly: true*
clusters* {...}
ldap_dn* string
role* string
}

Responses

Code	Description	Links
200	LDAP Group response Media type application/json Controls `Accept` header. Example Value **Schema** **LdapGroup** { all_clusters_auth boolean *readOnly: true*; clusters* {...}; ldap_dn* string; role* string }	*No links*
400	Bad request Media type application/json Example Value **Schema** { }	*No links*
404	Resource not found	*No links*

DELETE `/ldap/groups/{ldapGroupId}/` Delete a specific LDAP Group

Parameters

Try it out

Name	Description
ldapGroupId * required `string` *(path)*	The id of the LDAP Group to delete ldapGroupId - The id of the LDAP Group to d

Responses

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

GET `/ldap/setup/` Current LDAP setup

Parameters Try it out

No parameters

Responses

Code	Description	Links
200	LDAP setup response Media type application/json Controls `Accept` header. Example Value **Schema** **LdapSetup** {	*No links*
404	Resource not found	*No links*

```
    server*                  string
    port*                    string
    base_dn*                 string
    service_account_dn*      string
    service_account_password* string
    start_tls*               boolean
    insecure_skip_verify*    boolean
    validate_before_save     boolean
}
```

PUT `/ldap/setup/` Update the LDAP setup

Parameters Try it out

No parameters

Request body application/json

Update LDAP setup properties

Example Value **Schema**

LdapSetup {

```
server*                  string
port*                    string
base_dn*                 string
service_account_dn*      string
service_account_password* string
start_tls*               boolean
insecure_skip_verify*    boolean
validate_before_save     boolean
}
```

Responses

Code	Description	Links

200	LDAP setup response
	
	Media type: application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	LdapSetup {
	server* string
	port* string
	base_dn* string
	service_account_dn* string
	service_account_password* string
	start_tls* boolean
	insecure_skip_verify* boolean
	validate_before_save boolean
	}
		No links

400	Bad request
	
	Media type: application/json
	
	Example Value **Schema**
	
	{
	}
		No links

Local Users

GET `/local-users/` List all Local Users

Parameters Try it out

No parameters

Responses

Code	Description	Links
200	An array of Local Users Media type **application/json** Controls `Accept` header. Example Value **Schema** [**LocalUser** { username* string first_name string last_name string role* string disable* boolean password* string }]	*No links*

POST `/local-users/` Create a Local User

Parameters Try it out

No parameters

Request body **application/json**

Create Local User properties

Example Value **Schema**

LocalUser {
username* string
first_name string
last_name string
role* string
disable* boolean
password* string
}

Responses

Code	Description	Links

Code	Description	Links

201	Local User creation response
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	LocalUser {
	username* string
	first_name string
	last_name string
	role* string
	disable* boolean
	password* string
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

GET `/local-users/{localUserId}/` Info for a specific Local User

Parameters Try it out

Name	Description
localUserId * required `string` ***(path)***	The id of the Local User to retrieve localUserId - The id of the Local User to retrie

Responses

Code	Description	Links

Code	Description	Links

200	Local User response
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	LocalUser {
	username* string
	first_name string
	last_name string
	role* string
	disable* boolean
	password* string
	}
		No links

404	Resource not found	*No links*

PATCH `/local-users/{localUserId}/` Update a specific Local User

Parameters Try it out

Name	Description
localUserId * required `string` ***(path)***	The id of the Local User to update localUserId - The id of the Local User to upda

Request body application/json

Update Local User properties

Example Value **Schema**

LocalUser {
username* string
first_name string
last_name string
role* string
disable* boolean
password* string
}

Responses

Code	Description	Links

200	Local User response
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	LocalUser {
	username* string
	first_name string
	last_name string
	role* string
	disable* boolean
	password* string
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

404	Resource not found	*No links*

DELETE `/local-users/{localUserId}/` Delete a specific Local User

Parameters Try it out

Name	Description
localUserId * required `string` ***(path)***	The id of the Local User to delete localUserId - The id of the Local User to delet

Responses

Code	Description	Links

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

PATCH `/local-users/{localUserId}/password/` Update a specific Local User password

Parameters Try it out

Name	Description
localUserId * required `string` *(path)*	The id of the Local User to update localUserId - The id of the Local User to upda

Request body application/json

Update Local User password properties

Example Value **Schema**

```
{
  password              string
}
```

Responses

Code	Description	Links
200	Local User response Media type application/json Controls `Accept` header. Example Value **Schema** `{ message string }`	*No links*

Code	Description	Links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

404	Resource not found	*No links*

Node Groups

GET `/clusters/{clusterId}/node-groups/` List all cluster node groups

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster

Responses

Code	Description	Links

Code	Description	Links
200	An array of cluster node groups Media type application/json Controls `Accept` header. Example Value **Schema**	*No links*

```
[NodeGroup {
  name*                string
  size*                integer
                       minimum: 1
  template             string
  vcpus                integer
                       default: 2
  memory_mb            integer
                       default: 16384
  gpus                     [...]
  ssh_user             string
                       default:
  ssh_key              string
                       default:
  nodes                    [...]
  kubernetes_version*  string
}]
```

POST `/clusters/{clusterId}/node-groups/` Create a cluster node group

Parameters Try it out

Name	Description

clusterId * required
`string`
`(path)`
	The id of the cluster
	
	clusterId - The id of the cluster

Request body application/json

Create cluster node group properties

Example Value **Schema**

NodeGroup {

name*	string	
size*	integer	
	minimum: 1	
template	string	
vcpus	integer	
	default: 2	
memory_mb	integer	
	default: 16384	
gpus		
	[...]	
ssh_user	string	
	default:	
ssh_key	string	
	default:	
nodes		
	[...]	
kubernetes_version*	string	

}

Responses

Code	Description	Links

201	Cluster node group creation response
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	NodeGroup {
	name* string
	size* integer
	minimum: 1
	template string
	vcpus integer
	default: 2
	memory_mb integer
	default: 16384
	gpus
	[...]
	ssh_user string
	default:
	ssh_key string
	default:
	nodes
	[...]
	kubernetes_version* string
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

GET `/clusters/{clusterId}/node-groups/{nodeGroupId}/` Info for a speciifc cluster node groups

Parameters Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
nodeGroupId * required `string` *(path)*	The id of the node group nodeGroupId - The id of the node group

Responses

Code	Description	Links
200	Cluster node group response Media type: application/json Controls Accept header. Example Value **Schema**	*No links*
404	Resource not found	*No links*

NodeGroup

```
{
  name*                string
  size*                integer
                       minimum: 1
  template             string
  vcpus                integer
                       default: 2
  memory_mb            integer
                       default: 16384
  gpus                     [...]
  ssh_user             string
                       default:
  ssh_key              string
                       default:
  nodes                    [...]
  kubernetes_version*  string
}
```

PATCH `/clusters/{clusterId}/node-groups/{nodeGroupId}/` Update a specific cluster node group

Parameters

Try it out

Name	Description
clusterId * required `string` *(path)*	The id of the cluster clusterId - The id of the cluster
nodeGroupId * required `string` *(path)*	The id of the node group nodeGroupId - The id of the node group

Request body — application/json

Update cluster node group properties

Example Value **Schema**

NodeGroup

```
{
    name*                string
    size*                integer
                         minimum: 1
    template             string
    vcpus                integer
                         default: 2
    memory_mb            integer
                         default: 16384
    gpus
                             [...]
    ssh_user             string
                         default:
    ssh_key              string
                         default:
    nodes
                             [...]
    kubernetes_version*  string
}
```

Responses

Code	Description	Links

Code	Description	Links
200	Cluster node group response Media type application/json Controls `Accept` header. Example Value **Schema** **NodeGroup** {	*No links*

```
    name*                string
    size*                integer
                         minimum: 1
    template             string
    vcpus                integer
                         default: 2
    memory_mb            integer
                         default: 16384
    gpus
                             [...]
    ssh_user             string
                         default:
    ssh_key              string
                         default:
    nodes
                             [...]
    kubernetes_version*  string
}
```

400	Bad request Media type application/json Example Value **Schema**	*No links*

```
    {
}
```

404	Resource not found	*No links*

DELETE `/clusters/{clusterId}/node-groups/{nodeGroupId}/` Delete a specifc cluster node group

Parameters Try it out

Name	Description
clusterId * required `string` ***(path)***	The id of the cluster clusterId - The id of the cluster

Name	Description
nodeGroupId * required `string` *(path)*	The id of the node group nodeGroupId - The id of the node group

Responses

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

Providers

GET `/providers/` List all providers

Parameters Try it out

No parameters

Responses

Code	Description	Links
200	An array of Providers Media type application/json Controls `Accept` header. Example Value **Schema** **Providers** `[ { anyOf ->` **AKSProvider** `{...}` **EKSProvider** `{...}` **OpenstackProvider** `{...}` **VsphereProvider** `{...}` `}]`	*No links*

POST `/providers/` Create a provider

Parameters Try it out

No parameters

Request body application/json

Create provider properties

Example Value **Schema**

```
BaseProvider {
  name*                 string
  type*                 string
}
```

Responses

Code	Description	Links
201	Provider creation response Media type application/json Controls `Accept` header. Example Value **Schema** **Providers** [{ anyOf ->**AKSProvider** {...} **EKSProvider** {...} **OpenstackProvider** {...} **VsphereProvider** {...} }]	*No links*

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

GET `/providers/regions/` Regions for a given provider type

Parameters Try it out

Name	Description
type * required `string` *`(query)`*	The provider type (only 'eks' is currently supported) type - The provider type (only 'eks' is currentl

Responses

Code	Description	Links
200	successful response Media type application/json Controls `Accept` header. Example Value **Schema** `[string]`	*No links*

400	Bad request
	Media type
	application/json
	Example Value **Schema**
	{
	}
		No links

GET `/providers/{providerId}/` Info for a specific provider

Parameters Try it out

Name	Description

Name	Description
providerId * required `string` *(path)*	The id of the provider to retrieve providerId - The id of the provider to retrieve

Responses

Code	Description	Links
200	Returns one of our Provider types Media type **application/json** Controls `Accept` header. Example Value **Schema** `{ oneOf ->` **AKSProvider** `{...}` **EKSProvider** `{...}` **OpenstackProvider** `{...}` **VsphereProvider** `{...}` `}`	*No links*
404	Resource not found	*No links*

PATCH `/providers/{providerId}/` Update a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider to update providerId - The id of the provider to update

Request body **application/json**

Update provider properties

Example Value **Schema**

BaseProvider {

```
  name*          string
  type*          string
}
```

Responses

Code	Description	Links

200	Returns one of our Provider types
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	{
	oneOf -> **AKSProvider** {...} **EKSProvider** {...} **OpenstackProvider** {...} **VsphereProvider** {...}
	}
		No links

400	Bad request
	
	Media type
	application/json
	
	Example Value **Schema**
	
	{
	}
		No links

404	Resource not found	*No links*

DELETE `/providers/{providerId}/` Delete a specific provider

Parameters

Try it out

Name	Description

Name	Description
providerId * required `string` *(path)*	The id of the provider to delete providerId - The id of the provider to delete

Responses

Code	Description	Links
204	No response body	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/instance-types/` Instance types for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls `Accept` header. Example Value **Schema** `[string]`	*No links*

Code	Description	Links
404	Resource not found	*No links*

GET `/providers/{providerId}/roles/` Roles for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls `Accept` header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/images/` Images for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/networks/` Networks for a specific provider

Parameters

Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*

Code	Description	Links
404	Resource not found	*No links*

GET `/providers/{providerId}/flavors/` Flavors (openstack) for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls `Accept` header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/availability-zones/` Availability Zones for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/routers/` Routers for a specific provider

Parameters

Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*

Code	Description	Links
404	Resource not found	*No links*

GET `/providers/{providerId}/ssh-keys/` SSH Keys for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls `Accept` header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/dns-servers/` DNS Servers for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/datacenters/` Datacenters for a specific provider

Parameters

Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*

Code	Description	Links
404	Resource not found	*No links*

GET `/providers/{providerId}/clusters/` Clusters (vSphere) for a specific provider (not CCP tenant clusters)

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type **application/json** Controls `Accept` header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/resource-pools/` Resource Pools for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/datastores/` Datastores for a specific provider

Parameters

Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*

Code	Description	Links
404	Resource not found	*No links*

GET `/providers/{providerId}/gpus/` GPUs for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type **application/json** Controls `Accept` header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/gpu-vms/` GPU VMs for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/hx-overrides/` HX Overrides for a specific provider

Parameters

Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*

Code	Description	Links
404	Resource not found	*No links*

GET `/providers/{providerId}/vms/` VMs for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls `Accept` header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/resource-groups/` Resource Groups for a specific provider

Parameters Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*
404	Resource not found	*No links*

GET `/providers/{providerId}/locations/` Locations for a specific provider

Parameters

Try it out

Name	Description
providerId * required `string` *(path)*	The id of the provider providerId - The id of the provider

Responses

Code	Description	Links
200	successful response Media type application/json Controls Accept header. Example Value **Schema** `[string]`	*No links*

Code	Description	Links
404	Resource not found	*No links*

System

GET `/system/healthz/` Health check

Parameters Try it out

No parameters

Responses

Code	Description	Links

204	health check was completed successfully
	
	Media type
	application/json
	Controls `Accept` header.
	
	Example Value **Schema**
	
	{
	}
		No links

POST `/system/login/` Login to a local user or LDAP account

Parameters Try it out

No parameters

Responses

Code	Description	Links

Code	Description	Links

200	successful login
	
	Media type
	application/json
	Controls Accept header.
	Example Value Schema
	
	{
	}
		No links

GET /system/profile/ Returns profile data for current user

Parameters Try it out

No parameters

Responses

Code	Description	Links

200	successful request
	
	Media type
	application/json
	Controls Accept header.
	Example Value Schema
	
	{
	username string
	the authenticated user's username
	role string
	the authenticated user's role
	}
		No links

Schemas

AciProfile {

```
control_plane_contract_name* string
nameservers*                 [...]
node_vlan_start              integer
                             minimum: 1
                             maximum: 4094
node_vlan_end                integer
                             minimum: 1
                             maximum: 4094
multicast_range              string
service_subnet_start         string
pod_subnet_start             string
name*                        string
apic_hosts*                  string
apic_username*               string
apic_password*               string
aci_vmm_domain_name*         string
aci_infra_vlan_id*           integer
                             minimum: 1
                             maximum: 4094
vrf_name*                    string
l3_outside_policy_name*      string
l3_outside_network_name*     string
aaep_name*                   string
aci_tenant*                  string
}
```

Addon {

```
name*                string
namespace            string
                     default: default
overrides            string
overrideFiles        [...]
status               {...}
url                  string
}
```

BaseCluster {

```
name*                string
provider*            string
type*                string
}
```

AKSCluster {

```
name*                    string
provider*                string
type*                    string
agent_pool_name*         string
kubernetes_version*      string
location*                string
pod_cidr                 string
resource_group_name*     string
service_cidr             string
virtual_kubelet_enabled  boolean
worker_instance_type*    string
worker_count*            integer
                         minimum: 1
network_plugin           string
vnet_subnet_id           string
docker_bridge_cidr       string
dns_service_ip           string
}
```

EKSCluster {

```
name*                string
provider*            string
type*                string
region*              string
status               string
                     readOnly: true
status_detail
                        {...}
access_role_arn*     string
kubeconfig           string
                     readOnly: true
vpc_sizing*
                        {...}
ami*                 string
instance_type*       string
k8s_version*         string
ssh_keys
                        [...]
worker_count*        integer
                     minimum: 1
vpc_id*              string
}
```

OpenstackCluster {

```
name*                   string
provider*               string
type*                   string
status                  string
                        readOnly: true
kubeconfig              string
                        readOnly: true
network_plugin          string
network_type*           string
public_network_uuid*    string
vm_network_dns_servers
                           [...]
kubernetes_version*     string
pod_cidr*               string
ssh_key_name*           string
master_count*           integer
                        minimum: 1
                        maximum: 3
force_id                string
flavor*                 string
image*                  string
worker_count*           integer
                        minimum: 1
master_vip              string
vm_network_subnet       string
vm_network_uuid         string
http_proxy              string
https_proxy             string
ntp_pools
                           [...]
ntp_servers
                           [...]
root_ca_registries
                           [...]
router_uuid             string
self_signed_registries
                           {...}
etcd_encrypted          boolean
                        default: false
skip_management         boolean
                        default: false
nginx_ingress_class     string
cinder_az               string
nova_az                 string
docker_no_proxy
                           [...]
control_plane           boolean
                        default: false
}
```

VsphereCluster {

name*	string
provider*	string
type*	string
description	string
aci_profile_name	string *readOnly: true*
control_plane	boolean *default: false*
kubernetes_version	string *readOnly: true*
ip_allocation_method*	string
master_vip	string
load_balancer_num	integer *minimum: 1*
subnet_id	string
ntp_pools	[...]
ntp_servers	[...]
root_ca_registries	[...]
self_signed_registries	{...}
insecure_registries	[...]
docker_http_proxy	string
docker_https_proxy	string
docker_bip	string
ingress_as_lb	boolean *default: true*
nginx_ingress_class	string
etcd_encrypted	boolean *default: false*
skip_management	boolean *default: false*
docker_no_proxy	[...]
routable_cidr	string
image_prefix	string
vsphere_infra*	{...}
master_group*	**NodeGroup** {...}
node_groups	[...]
network_plugin_profile	{...}

}

Clusters [**Clusters** {

anyOf ->

AKSCluster {...}

EKSCluster {...}

OpenstackCluster {...}

VsphereCluster {...}

}]

LdapGroup {

all_clusters_auth	boolean *readOnly: true*
clusters*	{...}
ldap_dn*	string
role*	string

}

LdapSetup {

```
server*                   string
port*                     string
base_dn*                  string
service_account_dn*       string
service_account_password* string
start_tls*                boolean
insecure_skip_verify*     boolean
validate_before_save      boolean
}
```

LocalUser {

```
username*           string
first_name          string
last_name           string
role*               string
disable*            boolean
password*           string
}
```

NodeGroup {

```
name*               string
size*               integer
                    minimum: 1
template            string
vcpus               integer
                    default: 2
memory_mb           integer
                    default: 16384
gpus
                        [...]
ssh_user            string
                    default:
ssh_key             string
                    default:
nodes
                        [...]
kubernetes_version* string
}
```

BaseProvider {

```
name*               string
type*               string
}
```

AKSProvider {

```
name*               string
type*               string
app_name*           string
client_id*          string
client_secret*      string
tenant_id*          string
subscription_id*    string
}
```

EKSProvider {

```
name*                string
type*                string
role_arn*            string
access_key_id*       string
secret_access_key*   string
}
```

OpenstackProvider {

```
name*                string
type*                string
auth_url*            string
ca_cert              string
domain_name*         string
insecure_skip_verify boolean
password*            string
region*              string
tenant_name*         string
username*            string
}
```

VsphereProvider {

```
name*                 string
type*                 string
address*              string
port*                 integer
                      minimum: 1
                      maximum: 65535
username*             string
password*             string
insecure_skip_verify* boolean
}
```

Providers [**Providers** {
anyOf ->

AKSProvider {

name*	string
type*	string
app_name*	string
client_id*	string
client_secret*	string
tenant_id*	string
subscription_id*	string

}

EKSProvider {

name*	string
type*	string
role_arn*	string
access_key_id*	string
secret_access_key*	string

}

OpenstackProvider {

name*	string
type*	string
auth_url*	string
ca_cert	string
domain_name*	string
insecure_skip_verify	boolean
password*	string
region*	string
tenant_name*	string
username*	string

}

VsphereProvider {

name*	string
type*	string
address*	string
port*	integer *minimum: 1* *maximum: 65535*
username*	string
password*	string
insecure_skip_verify*	boolean

}

}]

Error {

code*	integer($int32)
message*	string

}

swagger-api.json Explore

Note: This section applies to v2 Clusters.

Cisco Container Platform Control Plane API Documentation

[Base URL: https://Cisco Container Platform Control Plane IP/2/]
swagger-api.json

Schemes
HTTP

/v3 CCP v3 API

DELETE `/v3/{resource}` forwards v3 API requests to the v3 API service

GET `/v3/{resource}` forwards v3 API requests to the v3 API service

HEAD `/v3/{resource}` forwards v3 API requests to the v3 API service

PATCH `/v3/{resource}` forwards v3 API requests to the v3 API service

POST `/v3/{resource}` forwards v3 API requests to the v3 API service

PUT `/v3/{resource}` forwards v3 API requests to the v3 API service

2/aci_api accessing ACI api

POST `/2/aci_api/login` ACI login

2/aci_profiles List of ACI profile endpoints

GET `/2/aci_profiles` Get all ACI profiles

POST `/2/aci_profiles` Create an ACI profile with the given configuration

GET `/2/aci_profiles/{aciProfileName}` Get an ACI profile by name

DELETE `/2/aci_profiles/{aciProfileUUID}` Delete an ACI profile

PATCH `/2/aci_profiles/{aciProfileUUID}` Update an ACI profile

2/clusters List of cluster endpoints

GET `/2/clusters` Get all clusters

POST `/2/clusters` Create a cluster with the given specification

GET `/2/clusters/{clusterID}/authz` List authorizations for a cluster

POST `/2/clusters/{clusterID}/authz` Add authorization for a cluster

DELETE `/2/clusters/{clusterID}/authz/{authID}` Delete authorization for a cluster

GET `/2/clusters/{clusterName}` Get a cluster by name

DELETE `/2/clusters/{clusterUUID}` Delete a cluster

PATCH `/2/clusters/{clusterUUID}` Patch a cluster

PUT `/2/clusters/{clusterUUID}` Update a cluster

GET `/2/clusters/{clusterUUID}/dashboard` Get dashboard

GET `/2/clusters/{clusterUUID}/env` Get cluster environment

GET `/2/clusters/{clusterUUID}/helmcharts` Get HelmCharts object for a given cluster

POST `/2/clusters/{clusterUUID}/helmcharts` Create a helmChart for cluster with the given specification

DELETE `/2/clusters/{clusterUUID}/helmcharts/{HelmChartUUID}` Delete helm chart for cluster

POST `/2/clusters/{clusterUUID}/nodepools` Create a node pool for a cluster

DELETE `/2/clusters/{clusterUUID}/nodepools/{nodePoolID}` Delete a node pool from a cluster

PATCH `/2/clusters/{clusterUUID}/nodepools/{nodePoolID}` Update a node pool in a cluster

PATCH `/2/clusters/{clusterUUID}/upgrade` Upgrade a cluster

2/keyvalues List of endpoints for key values

GET `/2/keyvalues/{key}`

POST `/2/keyvalues/{key}`

2/ldap List of ldap endpoints

GET `/2/ldap/groups` Get CX LDAP Groups

POST `/2/ldap/groups` Create CX LDAP Group

PUT `/2/ldap/groups` Update a CX LDAP Group.

GET `/2/ldap/groups/authz` Get CX the cluster authorizations for a CX LDAP group

DELETE `/2/ldap/groups/{ldapDN}` Delete CX LDAP Group specified by LDAP DN

GET `/2/ldap/setup` Get LDAP parameters

PUT `/2/ldap/setup` Setup/update LDAP parameters

2/license List of licensing endpoints

DELETE `/2/license/{resource}` Refer to the smart licensing documentation

GET `/2/license/{resource}` Refer to the smart licensing documentation

DELETE `/2/license/{resource}/{agentID}` Refer to the smart licensing documentation

GET `/2/license/{resource}/{agentID}` Refer to the smart licensing documentation

POST `/2/license/{resource}/{agentID}` Refer to the smart licensing documentation

2/localusers

GET `/2/localusers` Get CX local users

POST `/2/localusers` Create CX local user

DELETE `/2/localusers/{username}` Delete a local user

PATCH `/2/localusers/{username}` Update a local user. Can provide either or both parameters.

PATCH `/2/localusers/{username}/password` Update

2/providerclientconfigs List of provider client config endpoints

GET	`/2/providerclientconfigs`	Get provider client configuration list
POST	`/2/providerclientconfigs`	Add provider client configuration
DELETE	`/2/providerclientconfigs/{clientconfigUUID}`	Delete provider client configuration
GET	`/2/providerclientconfigs/{clientconfigUUID}`	Get provider client configuration
PATCH	`/2/providerclientconfigs/{clientconfigUUID}`	Update provider client configuration
GET	`/2/providerclientconfigs/{clientconfigUUID}/clusters`	Get list of clusters who are using providerclientconfig
GET	`/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter`	Gets the list of vSphere Data Centers.
GET	`/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/cluster`	Gets the list of vSphere Clusters in a datacenter.
GET	`/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/cluster/{clusterName}/gpu`	Gets the list of VSphere GPUs.
GET	`/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/cluster/{clusterName}/pool`	Gets the list of vSphere Pools.
GET	`/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/datastore`	Gets the list of vSphere Datastores.
GET	`/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/network`	Gets the list of vSphere Networks.
GET	`/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/vm`	Gets the list of vSphere Virtual Machines.

2/rbac

GET	`/2/rbac`	get the role of the current user

2/system List of system endpoints

GET	`/2/system/CorcHealth`	Get corc health

GET `/2/system/health` Returns the health of the system

GET `/2/system/livenessHealth` Returns a string representing the health of the system

POST `/2/system/login` Management server login

Models

api.ACILoginReply {

token*	string

}

api.ACILoginRequest {

apic_ips*	string
apic_password*	string
apic_username*	string

}

api.AddAuthorization {

Local*	boolean
Name*	string

}

api.AddAuthorizationReply {

AuthID*	string
Local*	boolean
Name*	string

}

api.CorcHealthReply {

}

api.CorcHealthRequest {

}

api.CreateLocalUserRequest {

```
    Disable*              boolean
    FirstName*            string
    LastName*             string
    Password*             string
    Role*                 string
    Token*                string
    UserName*             string
}
```

api.CreateLocalUserResponse {

```
}
```

api.CreateNodePoolReply {

```
    NodePool*
```

api.CreateNodePoolReply.NodePool {...}

```
}
```

api.CreateNodePoolReply.NodePool {

```
}
```

api.DeleteNodePoolReply {

```
}
```

api.GetVSphereClustersReply {

```
    Clusters*
                          [...]
}
```

api.GetVSphereDatacentersReply {

```
    Datacenters*
                          [...]
}
```

api.GetVSphereDatastoresReply {

```
    Datastores*
                          [...]
}
```

api.GetVSphereGpusReply {

```
    gpus*                       [...]
}
```

api.GetVSphereNetworksReply {

```
    Networks*                   [...]
}
```

api.GetVSpherePoolsReply {

```
    Pools*                      [...]
}
```

api.GetVSphereVMsReply {

```
    VMs*                        [...]
}
```

api.GpuHostIndex {

```
    gpu_type*           string
    hosts*                      [...]
}
```

api.HostGpuCount {

```
    count*              integer($int32)
    hostname*           string
}
```

api.LdapGroup {

```
    LdapDN*             string
    Role*               string
}
```

api.NodePoolRequest {

gpus*	[...]
labels*	string
memory*	integer($int64)
name*	string
node_ip_pool_uuid*	string
size*	integer($int32)
taints*	string
template*	string
vcpus*	integer($int32)

}

api.ResizeNodePoolRequest {

size*	integer($int32)

}

api.UpdateLocalUserPasswordRequest {

logged_in_user_password*	string
new_password*	string

}

api.UpdateLocalUserRequest {

Disable*	boolean
FirstName*	string
LastName*	string
Role*	string

}

ipam.IPInfo {

gateway*	string
id*	integer
ip*	string
mtu*	integer($int32)
nameservers*	[...]
netmask*	string
subnet	string
uuid*	string

}

ipam.LoadBalancerIPInfo {

IPInfo*	ipam.IPInfo {...}
never_release*	boolean

}

ipam.NodeIPInfo {

IPInfo*	ipam.IPInfo {...}
if_name*	string
type*	{...}

}

main.GetRoleResonse {

role*	string

}

types.ACIProfile {

aaep_name*	string
aci_allocator	types.ACIProfileAllocatorConfig {...}
aci_infra_vlan_id*	integer
aci_tenant*	string
aci_vmm_domain_name*	string
apic_hosts*	string
apic_password*	string
apic_username*	string
control_plane_contract_name*	string
l3_outside_network_name*	string
l3_outside_policy_name*	string
name*	string
nameservers*	[...]
uuid*	string
vrf_name*	string

}

types.ACIProfileAllocatorConfig {

multicast_range*	string
node_vlan_end*	integer
node_vlan_start*	integer
pod_subnet_start*	string
service_subnet_start*	string

}

types.Cluster {

Infra*	**types.Cluster.Infra** {...}
aci_profile_uuid*	string
aws_iam_enabled*	boolean
aws_iam_role_arn*	string
ccp_private_ssh_key*	string
ccp_public_ssh_key*	string
cluster_dashboard_url*	string
cluster_env_url*	string
deployer*	**types.Kubeadm** {...}
description*	string
etcd_encrypted*	boolean
harbor_admin_server_password*	string
harbor_registry_size*	string
helm_charts*	[...]
ingress_vip_pool_id*	string
ingress_vips*	[...]
is_adopt*	boolean
is_control_cluster*	boolean
is_harbor_enabled*	boolean
is_istio_enabled*	boolean
kubernetes_version*	string
labels*	[...]
load_balancer_ip_info_list*	[...]
load_balancer_ip_num*	integer($int32)
master_mac_addresses*	[...]
master_node_pool	**types.Cluster.master_node_pool** {...}
master_vip*	string
master_vip_addr_id*	string
masters*	integer($int32)
name*	string
network_plugin*	**types.NetworkPluginProfile** {...}
node_ip_pool_uuid	string
node_pools*	[...]
nodes*	[...]
ntp_pools*	[...]
ntp_servers*	[...]
provider_client_config_uuid*	string
registries_insecure*	[...]
registries_root_ca*	[...]
registries_self_signed*	[...]
secure_multitenancy_enabled*	boolean
ssh_key*	string
ssh_user*	string
state*	string
storage_class*	string
template*	string
tsig_key*	string
type*	{...}
uuid*	string
worker_node_pool	**types.Cluster.worker_node_pool** {...}
workers*	integer($int32)

}

types.Cluster.Infra {

}

types.Cluster.master_node_pool {

}

types.Cluster.node_pools {

}

types.Cluster.worker_node_pool {

}

types.GpuTypeCount {

```
count*                integer($int32)
gpu_type*             string
```

}

types.HelmChart {

```
chart_url*            string
cluster_UUID*         string
helmchart_uuid*       string
name*                 string
options*              string
```

}

types.K8SNodeStatus {

```
LastTransitionTime*   string
NodeCondition*        string
NodeName*             string
NodeStatus*           string
```

}

types.K8SPodStatus {

```
LastTransitionTime*   string
PodCondition*         string
PodName*              string
PodStatus*            string
```

}

types.Kubeadm {

provider*	types.VsphereCloudProvider {...}
provider_type*	string

}

types.Label {

key*	string
value*	string

}

types.LdapSetup {

BaseDN*	string
InsecureSkipVerify*	boolean
Port*	integer
Server*	string
ServiceAccountDN*	string
ServiceAccountPassword*	string
StartTLS*	boolean

}

types.LoginStatus {

from_host*	string
last_fail*	string($date-time)
last_success*	string($date-time)
login_id*	string
proto*	string
status*	string
to_host*	string
total_fail*	integer($int32)

}

types.NetworkPluginProfile {

details*	string
name*	string
status*	string

}

types.Node {

cloud_init_data*	string
error_log*	string
ip_info*	[...]
is_master*	boolean
kubernetes_version*	string
mac_addresses*	[...]
name*	string
node_pool_id*	integer
node_pool_type*	string
private_ip*	string
public_ip*	string
state*	string
template*	string
uuid*	string

}

types.ProviderClientConfig {

config*	types.ProviderClientConfig.config {...}
name*	string
type*	{...}
uuid*	string

}

types.ProviderClientConfig.config {

}

types.SystemHealth {

CurrentNodes*	integer($int32)
ExpectedNodes*	integer($int32)
NodesStatus*	[...]
PodStatusList*	[...]
TotalSystemHealth*	string

}

types.VsphereClientConfig {

ip*	string
password	string
port*	integer
username*	string

}

types.VsphereCloudProvider {

client_config;omitempty*	**types.VsphereClientConfig** {...}
vsphere_client_config_uuid*	string
vsphere_datacenter*	string
vsphere_datastore*	string
vsphere_scsi_controller_type*	string
vsphere_working_dir*	string

}

ERROR {···}