



Cisco Container Platform 2.0.0 API Guide

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Abstract

The Cisco Container Platform 2.0.0 API Guide gives information on Cisco Container Platform APIs and development features.

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Cisco Container Platform 2.0.0 API Guide
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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.

You can access the Swagger UI for Cisco Container Platform API using the following URL:

```
https://<CCP IP>:<Port>/2/swaggerapi
```

Where, `<CCP IP>` is the node-port IP address or the master VIP, and `<Port>` is the port number used by the Cisco Container Platform control plane.

2 Authentication

The Cisco Container Platform REST API server uses basic authentication with a local or Active Directory to authenticate API requests.

3 Authorization

In Cisco Container Platform, there are two kinds of **roles**, namely, administrators and users. Administrators can create, read, update, and delete all resources. Users have limited capabilities and can only read a subset of the objects.

After a client is authenticated, it has permission to all or a subset of the API based on the type of user used for authentication. For example, the client may see a subset of the data when authenticated as a non-administrator user.

4 Key Concepts

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

For example:

- To query a cluster information use:
`https://CCPIP:Port/2/clusters/<Cluster Name>`
- To connect a kubeconfig file to a cluster use:
`https://CCPIP:Port/2/clusters/<Cluster UUID>/env`

Cisco Container Platform allows you to connect to infrastructure providers such as vSphere to create Kubernetes clusters on them. Information to connect to the provider, such as the vCenter URL, username and password are part of a `providerclientconfig` resource. Cisco Container Platform Installer configures a default `providerclientconfig` resource named `vsphere` which can be used to create clusters.

A Kubernetes cluster in Cisco Container Platform consists of a master node and multiple worker nodes. The master node has a fixed Virtual IP that is allocated from a Virtual IP Pool provided by the user. The Cisco Container Platform Installer uses a Virtual IP.

5 Use Cases Examples of Cisco Container Platform APIs

5.1 Creating a Tenant Cluster

Before you Begin

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

Procedure

1. Export web IP:Port to the MGMT_HOST environment variable.

Command

```
export MGMT_HOST=<Web UI IP:PORT>
```

Example

```
export MGMT_HOST=10.20.30.40:32443
```

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://$MGMT_HOST/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://$MGMT_HOST/2/system/login/
```

3. Get list of Provider Client Configurations.

Command

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

Example

```
curl -sk -b cookie.txt -H "Content-Type: application/json"
https://$MGMT_HOST/2/providerclientconfigs/ | jq '.[].uuid'
"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://$MGMT_HOST/2/providerclientconfigs/${PCC}/vsphere/datacenter | jq
'.Datacenters[]'
```

Example

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

Example

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

```
"ccp-tenant-image-1.10.1-2.0.0.ova"
```

```
"ccp-tenant-image-1.11.3-2.0.0.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-1.11.3-2.0.0.ova
```

9. Get the list of networks.

Command

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

Example

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

"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://$MGMT_HOST/2/providerclientconfigs/${PCC}/vsphere/datacenter/${DCC}/cluster|jq '.Clusters[]'
```

Example

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

"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://$MGMT_HOST/2/providerclientconfigs/${PCC}/vsphere/datacenter/${DCC}/cluster/${CLUSTER}/pool|jq ".Pools[]"
```

Example

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

"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://$MGMT_HOST/2/providerclientconfigs/${PCC}/vsphere/datacenter/${DCC}/datastore | jq -r '.Datastores[] | select(.|startswith("SpringpathDS"))|not'
```

Example

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

```
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`
```

20. Get the list of subnets.

Command

```
curl -sk -b cookies.txt -H "Content-Type: application/json" <https://CCP Control plane host IP>:<Port>/2/network_service/subnets/ | jq -r '[0].uuid'
```

Example

```
curl -sk -b cookies.txt -H "Content-Type: application/json"
https://10.10.1.2:32442/2/network_service/subnets/ | jq -r
'[0].uuid'
```

```
"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 cookies.txt -H "Content-Type: application/json" <https://CCP Control plane host IP>:<Port>/2/network_service/subnets/${SUBNET}/pools| jq -r '[0].uuid'
```

Example

```
curl -sk -b cookies.txt -H "Content-Type: application/json"
https://10.10.1.2:32442/2/network_service/subnets/${SUBNET}/pools| jq -r '[0].uuid'
```

```
"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": ${VIP_POOL},
  "resource_pool": "${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://$MGMT_HOST/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://$MGMT_HOST/2/clusters | tee output.txt | jq
'.name,.uuid,.state'

"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://$MGMT_HOST/2/clusters/${TC}/env -o ${TC}.env

```

Example

```

curl -sk -b cookie.txt https://$MGMT_HOST/2/clusters/${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
```

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

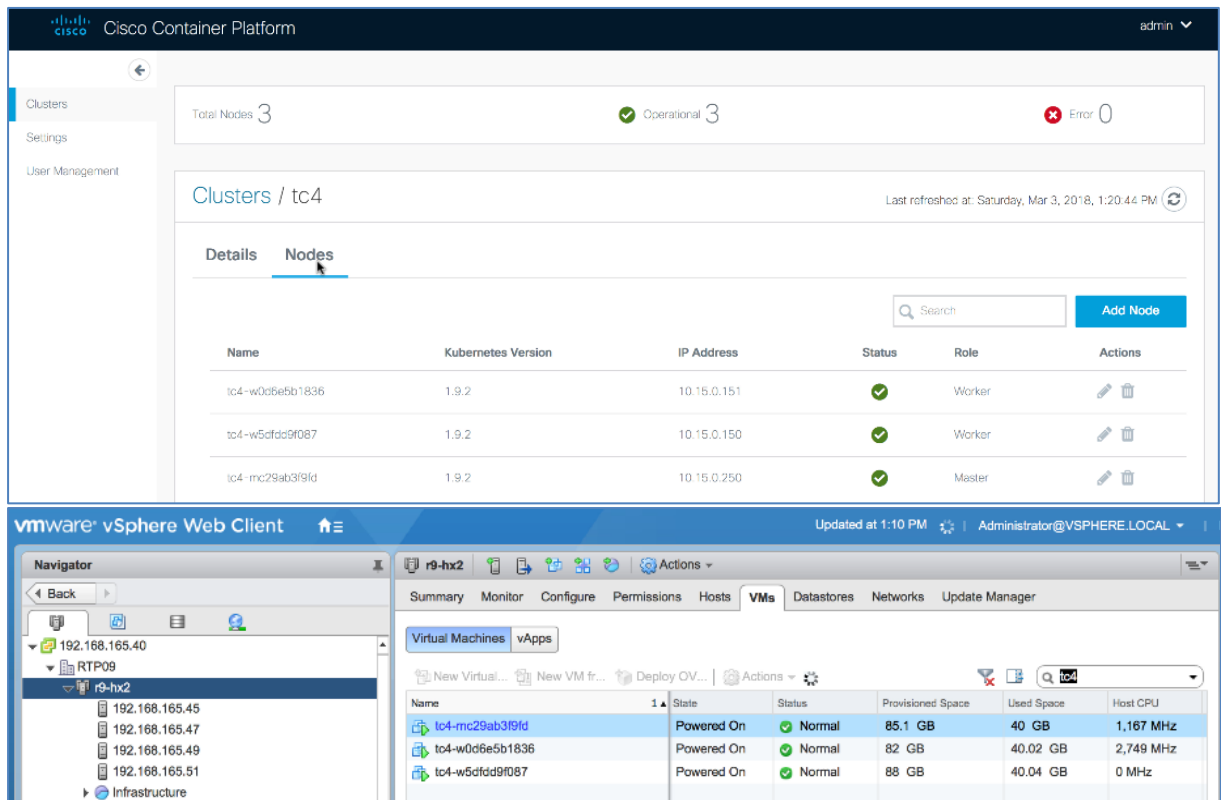
Cisco Container Platform Clusters overview page. Summary: Total Clusters 4, Healthy 4, Warning 0, Error 0. Last refreshed at: Saturday, Mar 3, 2018, 1:20:17 PM.

Name	Description	Status	Kubernetes Version	Nodes	Actions
tc1	Tenant Cluster One	Healthy	1.9.2	Masters: 1 Workers: 3	[Actions]
tc2	Test Cluster Two	Healthy	1.8.4	Masters: 1 Workers: 2	[Actions]
tc3		Healthy	1.9.2	Masters: 1 Workers: 2	[Actions]
tc4		Healthy	1.9.2	Masters: 1 Workers: 2	[Actions]

Cisco Container Platform Clusters / tc4 details page. Summary: Total Nodes 3, Operational 3, Error 0. Last refreshed at: Saturday, Mar 3, 2018, 1:20:44 PM.

Details Nodes

- Name: tc4
- Description: READY
- Status: READY
- Kubernetes Version: 1.9.2
- Master Nodes: 1
- Worker Nodes: 2
- Infrastructure Provider: fc53bae8-d973-4644-b13f-693949154a22
- vCenter Cluster: r9-hx2
- Datastore: r9-hx2-datastore-1
- Network: r9-hx2-Resources
- Resource Pool: r9-hx2-Resources
- VM Template: cco-tenant-image-1.9.2-0.9.1.ovf



5.2 Deleting a Tenant Cluster

Before you Begin

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

Procedure

1. Export web IP:Port to MGMT_HOST environment variable.

Command

```
export MGMT_HOST=<Web UI IP:PORT>
```

Example

```
export MGMT_HOST=10.20.30.40:32443
```

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://$MGMT_HOST/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://$MGMT_HOST/2/system/login/
```

3. List tenant clusters.

Command

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

Example

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

Example

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

5.3 Configuring Windows AD Service Account for Authentication

Before you Begin

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

Procedure

1. Export web IP:Port to MGMT_HOST environment variable.

Command

```
export MGMT_HOST=<Web UI IP:PORT>
```

Example

```
export MGMT_HOST=10.20.30.40:32443
```

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://$MGMT_HOST/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://$MGMT_HOST/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

# 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://$MGMT_HOST/2/ldap/setup
```

Example

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

Example

```
curl -k -b cookie.txt https://$MGMT_HOST/2/ldap/setup {
  "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
}
```

5.4 Assigning and Removing Windows AD Group to Tenant Cluster

Before you Begin

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

Procedure

1. Export web IP:Port to MGMT_HOST environment variable.

Command

```
export MGMT_HOST=<Web UI IP:PORT>
```

Example

```
export MGMT_HOST=10.20.30.40:32443
```

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://$MGMT_HOST/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://$MGMT_HOST/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://$MGMT_HOST/2/ldap/groups
```

Example

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

Example

```
curl -sk -b cookie.txt https://$MGMT_HOST/2/ldap/groups
[
  {
    "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://$MGMT_HOST/2/clusters| jq -r '.[].name, .uuid'
```

Example

```
curl -sk -b cookie.txt https://$MGMT_HOST/2/clusters| jq -r
```

```
'.[|].name, .uuid'  
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://$MGMT_HOST/2/clusters/${TC}/authz
```

Example

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

Example

```
curl -sk -b cookie.txt  
https://$MGMT_HOST/2/clusters/${TC}/authz  
  
{  
  "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://$MGMT_HOST/2/system/login/
```

Example

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

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

Command

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

Example

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

```
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://$MGMT_HOST/2/clusters/${TC}/env -o ${TC}.env
```

Example

```
curl -sk -b cookie.txt https://$MGMT_HOST/2/clusters/${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
```

```

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

```

- Remove AD group access.

Command

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

Example

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

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

Command

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

Example

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

{
  "AuthList": []
}
```

5.5 Download Tenant Cluster KUBECONFIG Environment File

Before you Begin

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

Procedure

- Export web IP:Port to MGMT_HOST environment variable.

Command

```
export MGMT_HOST=<Web UI IP:PORT>
```

Example

```
export MGMT_HOST=10.20.30.40:32443
```

- 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://$MGMT_HOST/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://$MGMT_HOST/2/system/login/
```

- List tenant clusters.

Command

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

Example

```
curl -sk -b cookie.txt https://$MGMT_HOST/2/clusters | jq -r
'[][]|.name, .uuid'
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://$MGMT_HOST/2/clusters/${TC}/env -o ${TC}.env
```

Example

```
curl -sk -b cookie.txt https://$MGMT_HOST/2/clusters/${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
```

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

5.6 Obtaining TC Master and Ingress VIPs

FOR MASTER

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

FOR INGRESS VIPs

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

6 Cisco Container Platform API Reference

2/system : List of system endpoints

POST /2/system/login Management server login

Parameters

Parameter	Value	Description	Parameter Type	Data Type
username	<input type="text"/>	User Name	formData	string
password	<input type="text"/>	Password	formData	string
token	<input type="text"/>	JWT Token	formData	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	OK		

default

[Try it out!](#)

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

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	OK		

default

[Try it out!](#)

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

Response Class (Status 200)

OK

Model | Example Value

```
{
  "TotalSystemHealth": "string",
  "CurrentNodes": 0,
  "ExpectedNodes": 0,
  "NodesStatus": [
```

```

{
  "nodeName": "string",
  "nodeCondition": "string",
  "nodeStatus": "string",
  "lastTransitionTime": "string"
}
],
"podStatusList": [
  {
    "podName": "string",
    "podCondition": "string",
    "podStatus": "string",
    "lastTransitionTime": "string"
  }
]
}

```

Response Content Type

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default			

GET /2/system/CorcHealth

[Get corc health](#)

Response Class (Status 200)

OK

Model | Example Value

```
{}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value

```
{}
```

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

default

Model | Example Value

```
{}
```

Try it out!

2/providerclientconfigs : List of provider client config endpoints

GET /2/providerclientconfigs

[Get provider client configuration list](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
name	<input type="text"/>	Provider Client Config Name	query	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Config found		
401	Unauthorized		
404	Config not found		

default

Try it out!

POST /2/providerclientconfigs

[Add provider client configuration](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value

Parameter content type:

application/json ▼

```
{
  "uuid": "string",
  "name": "string",
  "config": {}
}
```

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
201	Added config successfully	Model Example Value	
		<pre>{ "uuid": "string", "name": "string", "config": {} }</pre>	
400	Bad request		
401	Unauthorized		

Try it out!

DELETE /2/providerclientconfigs/{clientconfigUUID}

Delete provider client configuration

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Client Config UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
204	Deleted config successfully		
400	Config in use		
401	Unauthorized		
404	Config not found		

Try it out!

GET /2/providerclientconfigs/{clientconfigUUID}

Get provider client configuration

Response Class (Status 200)

Config found

Model | Example Value


```
{
  "uuid": "string",
  "name": "string",
  "config": {}
}
```

Response Content Type ▼

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Client Config UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	Config not found		

default

[Try it out!](#)

PATCH /2/providerclientconfigs/{clientconfigUUID}

Update provider client configuration

Response Class (Status 200)

Config found

Model | Example Value

```
{
  "uuid": "string",
  "name": "string",
  "config": {}
}
```

Response Content Type ▼

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value
	Parameter content type: application/json ▼			<pre>{ "uuid": "string", "name": "string", "config": {} }</pre>

clientconfigUUID	(required)	Client Config UUID	path	string
-------------------------	------------	---------------------------	------	--------

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	Config not found		

default

Try it out!

GET /2/providerclientconfigs/{clientconfigUUID}/clusters [Get list of clusters who are using providerclientconfig](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	(required)	Client Config UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Clusters found		
401	Unauthorized		
404	Clusters not found		

default

Try it out!

GET /2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter [Gets the list of vSphere Data Centers.](#)

Response Class (Status 200)

OK

Model | Example Value

```
{
  "Datacenters": [
    "string"
  ]
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Client Config UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

default

[Try it out!](#)

GET /2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/cluster

[Gets the list of vSphere Clusters in a datacenter.](#)

Response Class (Status 200)

OK

Model | Example Value

```
{
  "Clusters": [
    "string"
  ]
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Client Config UUID	path	string
datacenterName	<input type="text" value="(required)"/>	Datacenter Name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default			

[Try it out!](#)

GET `/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/vm`
[Gets the list of vSphere Virtual Machines.](#)

Response Class (Status 200)

OK

Model | Example Value

```
{
  "VMs": [
    "string"
  ]
}
```

Response Content Type ▼

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Client Config UUID	path	string
datacenterName	<input type="text" value="(required)"/>	Datacenter Name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default			

[Try it out!](#)

GET `/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/network`
[Gets the list of vSphere Networks.](#)

Response Class (Status 200)

OK

Model | Example Value

```
{
  "Networks": [
    "string"
  ]
}
```

```
]
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Client Config UUID	path	string
datacenterName	<input type="text" value="(required)"/>	Datacenter Name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

default

[Try it out!](#)

GET `/2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/datastore`

[Gets the list of vSphere Datastores.](#)

Response Class (Status 200)

OK

Model | [Example Value](#)

```
{
  "Datastores": [
    "string"
  ]
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Client Config UUID	path	string
datacenterName	<input type="text" value="(required)"/>	Datacenter Name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

default

[Try it out!](#)

GET /2/providerclientconfigs/{clientconfigUUID}/vsphere/datacenter/{datacenterName}/cluster/{clusterName}/pools
[Gets the list of vSphere Pools.](#)

Response Class (Status 200)

OK

Model | Example Value

```
{
  "Pools": [
    "string"
  ]
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clientconfigUUID	<input type="text" value="(required)"/>	Datacenter Name	path	string
datacenterName	<input type="text" value="(required)"/>	Datacenter Name	path	string
clusterName	<input type="text" value="(required)"/>	Cluster Name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

default

[Try it out!](#)

2/clusters : List of cluster endpoints

GET /2/clusters [Get all clusters](#)

Response Class (Status 200)

Clusters found

Model | Example Value

```
{
  "uuid": "string",
  "provider_client_config_uuid": "string",
}
```

```
"aci_profile_uuid": "string",
"name": "string",
"description": "string",
"workers": 0,
"masters": 0,
"state": "string",
"template": "string",
"ssh_user": "string",
"ssh_password": "string",
"ssh_key": "string",
"Infra": {},
"labels": [
  {
    "key": "string",
    "value": "string"
  }
],
"nodes": [
  {
    "uuid": "string",
    "name": "string",
    "public_ip": "string",
    "private_ip": "string",
    "is_master": true,
    "state": "string",
    "cloud_init_data": "string",
    "kubernetes_version": "string",
    "error_log": "string",
    "template": "string",
    "mac_addresses": [
      "string"
    ],
    "node_pool_type": "string",
    "node_pool_id": 0
  }
],
"deployer": {
  "provider_type": "string",
  "provider": {
    "vsphere_datacenter": "string",
    "vsphere_datastore": "string",
    "vsphere_scsi_controller_type": "string",
    "vsphere_working_dir": "string",
    "vsphere_client_config_uuid": "string",
    "client_config;omitempty": {
      "ip": "string",
      "port": 0,
      "username": "string",
      "password": "string"
    }
  }
},
```

```
"kubernetes_version": "string",
"cluster_env_url": "string",
"cluster_dashboard_url": "string",
"network_plugin": {
  "name": "string",
  "status": "string",
  "details": "string"
},
"ccp_private_ssh_key": "string",
"ccp_public_ssh_key": "string",
"ntp_pools": [
  "string"
],
"ntp_servers": [
  "string"
],
"is_control_cluster": true,
"is_adopt": true,
"registries_self_signed": [
  "string"
],
"registries_insecure": [
  "string"
],
"registries_root_ca": [
  "string"
],
"ingress_vip_pool_id": "string",
"ingress_vip_addr_id": "string",
"ingress_vips": [
  "string"
],
"helm_charts": [
  {
    "helmchart_uuid": "string",
    "cluster_UUID": "string",
    "chart_url": "string",
    "name": "string",
    "options": "string"
  }
],
"master_vip_addr_id": "string",
"master_vip": "string",
"master_mac_addresses": [
  "string"
],
"load_balancer_ip_num": 0,
"load_balancer_ip_info_list": [
  {
    "uuid": "string",
    "ip": "string"
  }
]
```



```

    ],
    "node_pools": [
      {}
    ],
    "is_istio_enabled": true,
    "is_harbor_enabled": true,
    "harbor_registry_size": "string",
    "harbor_admin_server_password": "string",
    "master_node_pool": {},
    "worker_node_pool": {},
    "storage_class": "string"
  }

```

Response Content Type

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	No cluster found		

default

Try it out!

POST /2/clusters

Create a cluster with the given specification

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value
	<div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div> <p>Parameter content type: <input type="text" value="application/json"/></p>			<pre> { "uuid": "string", "provider_client_config_uuid": "string", "aci_profile_uuid": "string", "name": "string", "description": "string", "workers": 0, "masters": 0, "state": "string", "template": "string", "ssh_user": "string", "ssh_password": "string", "ssh_key": "string", "Infra": {}, "labels": [{ "key": "string", "value": "string" }] } </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre>], "nodes": [{ "uuid": "string", "name": "string", "public_ip": "string", "private_ip": "string", "is_master": true, "state": "string", "cloud_init_data": "string", "kubernetes_version": "string", "error_log": "string", "template": "string", "mac_addresses": ["string"], "node_pool_type": "string", "node_pool_id": 0 }], "deployer": { "provider_type": "string", "provider": { "vsphere_datacenter": "string", "vsphere_datastore": "string", "vsphere_scsi_controller_type": "string", "vsphere_working_dir": "string", "vsphere_client_config_uuid": "string", "client_config;omitempty": { "ip": "string", "port": 0, "username": "string", "password": "string" } } }, "kubernetes_version": "string", "cluster_env_url": "string", "cluster_dashboard_url": "string", "network_plugin": { "name": "string", "status": "string", "details": "string" }, "ccp_private_ssh_key": "string", "ccp_public_ssh_key": "string", "ntp_pools": ["string"], "ntp_servers": ["string"], "is_control_cluster": true, "is_adopt": true, "registries_self_signed": ["string"], </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "registries_insecure": ["string"], "registries_root_ca": ["string"], "ingress_vip_pool_id": "string", "ingress_vip_addr_id": "string", "ingress_vips": ["string"], "helm_charts": [{ "helmchart_uuid": "string", "cluster_UUID": "string", "chart_url": "string", "name": "string", "options": "string" }], "master_vip_addr_id": "string", "master_vip": "string", "master_mac_addresses": ["string"], "load_balancer_ip_num": 0, "load_balancer_ip_info_list": [{ "uuid": "string", "ip": "string" }], "node_pools": [{}], "is_istio_enabled": true, "is_harbor_enabled": true, "harbor_registry_size": "string", "harbor_admin_server_password": "string", "master_node_pool": {}, "worker_node_pool": {}, "storage_class": "string" } </pre>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
201	Created cluster successfully	Model Example Value	
		<pre> { "uuid": "string", "provider_client_config_uuid": "string", "aci_profile_uuid": "string", </pre>	

HTTP Status
Code

Reason

Response Model

Headers

```
"name": "string",
"description": "string",
"workers": 0,
"masters": 0,
"state": "string",
"template": "string",
"ssh_user": "string",
"ssh_password": "string",
"ssh_key": "string",
"Infra": {},
"labels": [
  {
    "key": "string",
    "value": "string"
  }
],
"nodes": [
  {
    "uuid": "string",
    "name": "string",
    "public_ip": "string",
    "private_ip": "string",
    "is_master": true,
    "state": "string",
    "cloud_init_data": "string",
    "kubernetes_version": "string",
    "error_log": "string",
    "template": "string",
    "mac_addresses": [
      "string"
    ],
    "node_pool_type": "string",
    "node_pool_id": 0
  }
],
"deployer": {
  "provider_type": "string",
  "provider": {
    "vsphere_datacenter": "string",
    "vsphere_datastore": "string",
    "vsphere_scsi_controller_type": "string",
    "vsphere_working_dir": "string",
    "vsphere_client_config_uuid": "string",
    "client_config;omitempty": {
      "ip": "string",
      "port": 0,
      "username": "string",
      "password": "string"
    }
  }
},
"kubernetes_version": "string",
"cluster_env_url": "string",
"cluster_dashboard_url": "string",
"network_plugin": {
  "name": "string",
  "status": "string",
```

HTTP Status
Code

Reason

Response Model

Headers

```
"details": "string",
},
"ccp_private_ssh_key": "string",
"ccp_public_ssh_key": "string",
"ntp_pools": [
  "string"
],
"ntp_servers": [
  "string"
],
"is_control_cluster": true,
"is_adopt": true,
"registries_self_signed": [
  "string"
],
"registries_insecure": [
  "string"
],
"registries_root_ca": [
  "string"
],
"ingress_vip_pool_id": "string",
"ingress_vip_addr_id": "string",
"ingress_vips": [
  "string"
],
"helm_charts": [
  {
    "helmchart_uuid": "string",
    "cluster_UUID": "string",
    "chart_url": "string",
    "name": "string",
    "options": "string"
  }
],
"master_vip_addr_id": "string",
"master_vip": "string",
"master_mac_addresses": [
  "string"
],
"load_balancer_ip_num": 0,
"load_balancer_ip_info_list": [
  {
    "uuid": "string",
    "ip": "string"
  }
],
"node_pools": [
  {}
],
"is_istio_enabled": true,
"is_harbor_enabled": true,
"harbor_registry_size": "string",
"harbor_admin_server_password": "string",
"master_node_pool": {},
"worker_node_pool": {}
```

HTTP Status Code	Reason	Response Model	Headers
		<pre>"storage_class": "string" }</pre>	
400	Bad request		
401	Unauthorized		

[Try it out!](#)

DELETE [/2/clusters/{clusterUUID}](#) Delete a cluster

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
204	Deleted cluster successfully		
401	Unauthorized		
404	Cluster not found		

[Try it out!](#)

PATCH [/2/clusters/{clusterUUID}](#) Patch a cluster

Response Class (Status 200)

Cluster patched successfully

Model	Example Value
	<pre>{ "uuid": "string", "provider_client_config_uuid": "string", "aci_profile_uuid": "string", "name": "string", "description": "string", "workers": 0, "masters": 0, "state": "string", "template": "string", "ssh_user": "string", }</pre>

```
"ssh_password": "string",
"ssh_key": "string",
"Infra": {},
"labels": [
  {
    "key": "string",
    "value": "string"
  }
],
"nodes": [
  {
    "uuid": "string",
    "name": "string",
    "public_ip": "string",
    "private_ip": "string",
    "is_master": true,
    "state": "string",
    "cloud_init_data": "string",
    "kubernetes_version": "string",
    "error_log": "string",
    "template": "string",
    "mac_addresses": [
      "string"
    ],
    "node_pool_type": "string",
    "node_pool_id": 0
  }
],
"deployer": {
  "provider_type": "string",
  "provider": {
    "vsphere_datacenter": "string",
    "vsphere_datastore": "string",
    "vsphere_scsi_controller_type": "string",
    "vsphere_working_dir": "string",
    "vsphere_client_config_uuid": "string",
    "client_config;omitempty": {
      "ip": "string",
      "port": 0,
      "username": "string",
      "password": "string"
    }
  }
},
"kubernetes_version": "string",
"cluster_env_url": "string",
"cluster_dashboard_url": "string",
"network_plugin": {
  "name": "string",
  "status": "string",
  "details": "string"
},
```

```
"ccp_private_ssh_key": "string",
"ccp_public_ssh_key": "string",
"ntp_pools": [
  "string"
],
"ntp_servers": [
  "string"
],
"is_control_cluster": true,
"is_adopt": true,
"registries_self_signed": [
  "string"
],
"registries_insecure": [
  "string"
],
"registries_root_ca": [
  "string"
],
"ingress_vip_pool_id": "string",
"ingress_vip_addr_id": "string",
"ingress_vips": [
  "string"
],
"helm_charts": [
  {
    "helmchart_uuid": "string",
    "cluster_UUID": "string",
    "chart_url": "string",
    "name": "string",
    "options": "string"
  }
],
"master_vip_addr_id": "string",
"master_vip": "string",
"master_mac_addresses": [
  "string"
],
"load_balancer_ip_num": 0,
"load_balancer_ip_info_list": [
  {
    "uuid": "string",
    "ip": "string"
  }
],
"node_pools": [
  {}
],
"is_istio_enabled": true,
"is_harbor_enabled": true,
"harbor_registry_size": "string",
"harbor_admin_server_password": "string",
```



```
"master_node_pool": {},
"worker_node_pool": {},
"storage_class": "string"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value
	<div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div>			<pre>{ "uuid": "string", "provider_client_config_uuid": "string", "aci_profile_uuid": "string", "name": "string", "description": "string", "workers": 0, "masters": 0, "state": "string", "template": "string", "ssh_user": "string", "ssh_password": "string", "ssh_key": "string", "Infra": {}, "labels": [{ "key": "string", "value": "string" }], "nodes": [{ "uuid": "string", "name": "string", "public_ip": "string", "private_ip": "string", "is_master": true, "state": "string", "cloud_init_data": "string", "kubernetes_version": "string", "error_log": "string", "template": "string", "mac_addresses": ["string"], "node_pool_type": "string", "node_pool_id": 0 }], "deployer": { "provider_type": "string", "provider": { "vsphere_datacenter": "string", "vsphere_datastore": "string",</pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "vsphere_scsi_controller_type": "string", "vsphere_working_dir": "string", "vsphere_client_config_uuid": "string", "client_config;omitempty": { "ip": "string", "port": 0, "username": "string", "password": "string" } } }, "kubernetes_version": "string", "cluster_env_url": "string", "cluster_dashboard_url": "string", "network_plugin": { "name": "string", "status": "string", "details": "string" }, "ccp_private_ssh_key": "string", "ccp_public_ssh_key": "string", "ntp_pools": ["string"], "ntp_servers": ["string"], "is_control_cluster": true, "is_adopt": true, "registries_self_signed": ["string"], "registries_insecure": ["string"], "registries_root_ca": ["string"], "ingress_vip_pool_id": "string", "ingress_vip_addr_id": "string", "ingress_vips": ["string"], "helm_charts": [{ "helmchart_uuid": "string", "cluster_UUID": "string", "chart_url": "string", "name": "string", "options": "string" }], "master_vip_addr_id": "string", "master_vip": "string", "master_mac_addresses": ["string"], </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "load_balancer_ip_num": 0, "load_balancer_ip_info_list": [{ "uuid": "string", "ip": "string" }], "node_pools": [{}], "is_istio_enabled": true, "is_harbor_enabled": true, "harbor_registry_size": "string", "harbor_admin_server_password": "string", "master_node_pool": {}, "worker_node_pool": {}, "storage_class": "string" } </pre>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	Cluster not found		

default

Try it out!

PUT /2/clusters/{clusterUUID}

Update a cluster

Response Class (Status 200)

Cluster updated successfully

Model | Example Value

```

{
  "uuid": "string",
  "provider_client_config_uuid": "string",
  "aci_profile_uuid": "string",
  "name": "string",
  "description": "string",
  "workers": 0,
  "masters": 0,
  "state": "string",
  "template": "string",
  "ssh_user": "string",
  "ssh_password": "string",
  "ssh_key": "string",
  "Infra": {},

```

```
"labels": [
  {
    "key": "string",
    "value": "string"
  }
],
"nodes": [
  {
    "uuid": "string",
    "name": "string",
    "public_ip": "string",
    "private_ip": "string",
    "is_master": true,
    "state": "string",
    "cloud_init_data": "string",
    "kubernetes_version": "string",
    "error_log": "string",
    "template": "string",
    "mac_addresses": [
      "string"
    ],
    "node_pool_type": "string",
    "node_pool_id": 0
  }
],
"deployer": {
  "provider_type": "string",
  "provider": {
    "vsphere_datacenter": "string",
    "vsphere_datastore": "string",
    "vsphere_scsi_controller_type": "string",
    "vsphere_working_dir": "string",
    "vsphere_client_config_uuid": "string",
    "client_config;omitempty": {
      "ip": "string",
      "port": 0,
      "username": "string",
      "password": "string"
    }
  }
},
"kubernetes_version": "string",
"cluster_env_url": "string",
"cluster_dashboard_url": "string",
"network_plugin": {
  "name": "string",
  "status": "string",
  "details": "string"
},
"ccp_private_ssh_key": "string",
"ccp_public_ssh_key": "string",
"ntp_pools": [
```

```
    "string"
  ],
  "ntp_servers": [
    "string"
  ],
  "is_control_cluster": true,
  "is_adopt": true,
  "registries_self_signed": [
    "string"
  ],
  "registries_insecure": [
    "string"
  ],
  "registries_root_ca": [
    "string"
  ],
  "ingress_vip_pool_id": "string",
  "ingress_vip_addr_id": "string",
  "ingress_vips": [
    "string"
  ],
  "helm_charts": [
    {
      "helmchart_uuid": "string",
      "cluster_UUID": "string",
      "chart_url": "string",
      "name": "string",
      "options": "string"
    }
  ],
  "master_vip_addr_id": "string",
  "master_vip": "string",
  "master_mac_addresses": [
    "string"
  ],
  "load_balancer_ip_num": 0,
  "load_balancer_ip_info_list": [
    {
      "uuid": "string",
      "ip": "string"
    }
  ],
  "node_pools": [
    {}
  ],
  "is_istio_enabled": true,
  "is_harbor_enabled": true,
  "harbor_registry_size": "string",
  "harbor_admin_server_password": "string",
  "master_node_pool": {},
  "worker_node_pool": {}
}
```

```
"storage_class": "string"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model
				Example Value
				<pre>{ "uuid": "string", "provider_client_config_uuid": "string", "aci_profile_uuid": "string", "name": "string", "description": "string", "workers": 0, "masters": 0, "state": "string", "template": "string", "ssh_user": "string", "ssh_password": "string", "ssh_key": "string", "Infra": {}, "labels": [{ "key": "string", "value": "string" }], "nodes": [{ "uuid": "string", "name": "string", "public_ip": "string", "private_ip": "string", "is_master": true, "state": "string", "cloud_init_data": "string", "kubernetes_version": "string", "error_log": "string", "template": "string", "mac_addresses": ["string"], "node_pool_type": "string", "node_pool_id": 0 }], "deployer": { "provider_type": "string", "provider": { "vsphere_datacenter": "string", "vsphere_datastore": "string", "vsphere_scsi_controller_type": "string", "vsphere_working_dir": "string",</pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "vsphere_client_config_uuid": "string", "client_config;omitempty": { "ip": "string", "port": 0, "username": "string", "password": "string" } } }, "kubernetes_version": "string", "cluster_env_url": "string", "cluster_dashboard_url": "string", "network_plugin": { "name": "string", "status": "string", "details": "string" }, "ccp_private_ssh_key": "string", "ccp_public_ssh_key": "string", "ntp_pools": ["string"], "ntp_servers": ["string"], "is_control_cluster": true, "is_adopt": true, "registries_self_signed": ["string"], "registries_insecure": ["string"], "registries_root_ca": ["string"], "ingress_vip_pool_id": "string", "ingress_vip_addr_id": "string", "ingress_vips": ["string"], "helm_charts": [{ "helmchart_uuid": "string", "cluster_UUID": "string", "chart_url": "string", "name": "string", "options": "string" }], "master_vip_addr_id": "string", "master_vip": "string", "master_mac_addresses": ["string"], "load_balancer_ip_num": 0, "load_balancer_ip_info_list": [</pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> { "uuid": "string", "ip": "string" }], "node_pools": [{}], "is_istio_enabled": true, "is_harbor_enabled": true, "harbor_registry_size": "string", "harbor_admin_server_password": "string", "master_node_pool": {}, "worker_node_pool": {}, "storage_class": "string" } </pre>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	Cluster not found		

default

[Try it out!](#)

GET /2/clusters/{clusterName}

[Get a cluster by name](#)

Response Class (Status 200)

Cluster found

Model | Example Value

```

{
  "uuid": "string",
  "provider_client_config_uuid": "string",
  "aci_profile_uuid": "string",
  "name": "string",
  "description": "string",
  "workers": 0,
  "masters": 0,
  "state": "string",
  "template": "string",
  "ssh_user": "string",
  "ssh_password": "string",
  "ssh_key": "string",
  "Infra": {},
  "labels": [

```



```
{
  "key": "string",
  "value": "string"
}
],
"nodes": [
  {
    "uuid": "string",
    "name": "string",
    "public_ip": "string",
    "private_ip": "string",
    "is_master": true,
    "state": "string",
    "cloud_init_data": "string",
    "kubernetes_version": "string",
    "error_log": "string",
    "template": "string",
    "mac_addresses": [
      "string"
    ],
    "node_pool_type": "string",
    "node_pool_id": 0
  }
],
"deployer": {
  "provider_type": "string",
  "provider": {
    "vsphere_datacenter": "string",
    "vsphere_datastore": "string",
    "vsphere_scsi_controller_type": "string",
    "vsphere_working_dir": "string",
    "vsphere_client_config_uuid": "string",
    "client_config;omitempty": {
      "ip": "string",
      "port": 0,
      "username": "string",
      "password": "string"
    }
  }
},
"kubernetes_version": "string",
"cluster_env_url": "string",
"cluster_dashboard_url": "string",
"network_plugin": {
  "name": "string",
  "status": "string",
  "details": "string"
},
"ccp_private_ssh_key": "string",
"ccp_public_ssh_key": "string",
"ntp_pools": [
  "string"
```

```
],
"ntp_servers": [
  "string"
],
"is_control_cluster": true,
"is_adopt": true,
"registries_self_signed": [
  "string"
],
"registries_insecure": [
  "string"
],
"registries_root_ca": [
  "string"
],
"ingress_vip_pool_id": "string",
"ingress_vip_addr_id": "string",
"ingress_vips": [
  "string"
],
"helm_charts": [
  {
    "helmchart_uuid": "string",
    "cluster_UUID": "string",
    "chart_url": "string",
    "name": "string",
    "options": "string"
  }
],
"master_vip_addr_id": "string",
"master_vip": "string",
"master_mac_addresses": [
  "string"
],
"load_balancer_ip_num": 0,
"load_balancer_ip_info_list": [
  {
    "uuid": "string",
    "ip": "string"
  }
],
"node_pools": [
  {}
],
"is_istio_enabled": true,
"is_harbor_enabled": true,
"harbor_registry_size": "string",
"harbor_admin_server_password": "string",
"master_node_pool": {},
"worker_node_pool": {},
"storage_class": "string"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterName	<input type="text" value="(required)"/>	Cluster Name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	Cluster not found		

default

[Try it out!](#)

PATCH /2/clusters/{clusterUUID}/upgrade

Upgrade a cluster

Response Class (Status 200)

Cluster updated successfully

Model | Example Value

```
{
  "uuid": "string",
  "provider_client_config_uuid": "string",
  "aci_profile_uuid": "string",
  "name": "string",
  "description": "string",
  "workers": 0,
  "masters": 0,
  "state": "string",
  "template": "string",
  "ssh_user": "string",
  "ssh_password": "string",
  "ssh_key": "string",
  "Infra": {},
  "labels": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "nodes": [
    {
      "uuid": "string",
      "name": "string",
      "public_ip": "string",
```

```
"private_ip": "string",
"is_master": true,
"state": "string",
"cloud_init_data": "string",
"kubernetes_version": "string",
"error_log": "string",
"template": "string",
"mac_addresses": [
  "string"
],
"node_pool_type": "string",
"node_pool_id": 0
}
],
"deployer": {
  "provider_type": "string",
  "provider": {
    "vsphere_datacenter": "string",
    "vsphere_datastore": "string",
    "vsphere_scsi_controller_type": "string",
    "vsphere_working_dir": "string",
    "vsphere_client_config_uuid": "string",
    "client_config;omitempty": {
      "ip": "string",
      "port": 0,
      "username": "string",
      "password": "string"
    }
  }
}
},
"kubernetes_version": "string",
"cluster_env_url": "string",
"cluster_dashboard_url": "string",
"network_plugin": {
  "name": "string",
  "status": "string",
  "details": "string"
},
"ccp_private_ssh_key": "string",
"ccp_public_ssh_key": "string",
"ntp_pools": [
  "string"
],
"ntp_servers": [
  "string"
],
"is_control_cluster": true,
"is_adopt": true,
"registries_self_signed": [
  "string"
],
"registries_insecure": [
```

```

    "string"
  ],
  "registries_root_ca": [
    "string"
  ],
  "ingress_vip_pool_id": "string",
  "ingress_vip_addr_id": "string",
  "ingress_vips": [
    "string"
  ],
  "helm_charts": [
    {
      "helmchart_uuid": "string",
      "cluster_UUID": "string",
      "chart_url": "string",
      "name": "string",
      "options": "string"
    }
  ],
  "master_vip_addr_id": "string",
  "master_vip": "string",
  "master_mac_addresses": [
    "string"
  ],
  "load_balancer_ip_num": 0,
  "load_balancer_ip_info_list": [
    {
      "uuid": "string",
      "ip": "string"
    }
  ],
  "node_pools": [
    {}
  ],
  "is_istio_enabled": true,
  "is_harbor_enabled": true,
  "harbor_registry_size": "string",
  "harbor_admin_server_password": "string",
  "master_node_pool": {},
  "worker_node_pool": {},
  "storage_class": "string"
}

```

Response Content Type ▼

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body			body	Model Example Value
				<pre> { "uuid": "string", </pre>

Parameter	Value	Description	Parameter Type	Data Type
	<p>(required)</p> <div style="border: 1px solid black; height: 80px; width: 100%;"></div> <p>Parameter content type: <input type="text" value="application/json"/> ▼</p>			<pre> "provider_client_config_uuid": "string", "aci_profile_uuid": "string", "name": "string", "description": "string", "workers": 0, "masters": 0, "state": "string", "template": "string", "ssh_user": "string", "ssh_password": "string", "ssh_key": "string", "Infra": {}, "labels": [{ "key": "string", "value": "string" }], "nodes": [{ "uuid": "string", "name": "string", "public_ip": "string", "private_ip": "string", "is_master": true, "state": "string", "cloud_init_data": "string", "kubernetes_version": "string", "error_log": "string", "template": "string", "mac_addresses": ["string"], "node_pool_type": "string", "node_pool_id": 0 }], "deployer": { "provider_type": "string", "provider": { "vsphere_datacenter": "string", "vsphere_datastore": "string", "vsphere_scsi_controller_type": "string", "vsphere_working_dir": "string", "vsphere_client_config_uuid": "string", "client_config;omitempty": { "ip": "string", "port": 0, "username": "string", "password": "string" } } }, "kubernetes_version": "string", "cluster_env_url": "string", "cluster_dashboard_url": "string", "network_plugin": { </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "name": "string", "status": "string", "details": "string" }, "ccp_private_ssh_key": "string", "ccp_public_ssh_key": "string", "ntp_pools": ["string"], "ntp_servers": ["string"], "is_control_cluster": true, "is_adopt": true, "registries_self_signed": ["string"], "registries_insecure": ["string"], "registries_root_ca": ["string"], "ingress_vip_pool_id": "string", "ingress_vip_addr_id": "string", "ingress_vips": ["string"], "helm_charts": [{ "helmchart_uuid": "string", "cluster_UUID": "string", "chart_url": "string", "name": "string", "options": "string" }], "master_vip_addr_id": "string", "master_vip": "string", "master_mac_addresses": ["string"], "load_balancer_ip_num": 0, "load_balancer_ip_info_list": [{ "uuid": "string", "ip": "string" }], "node_pools": [{}], "is_istio_enabled": true, "is_harbor_enabled": true, "harbor_registry_size": "string", "harbor_admin_server_password": "string", "master_node_pool": {}, </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre>"worker_node_pool": {}, "storage_class": "string" }</pre>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	Cluster not found		

default

Try it out!

GET </2/clusters/{clusterID}/authz> [List authorizations for a cluster](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterID	<input type="text" value="(required)"/>	Cluster UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	OK		
401	Unauthorized		
404	Record not found		

default

Try it out!

POST </2/clusters/{clusterID}/authz> [Add authorization for a cluster](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterID	<input type="text" value="(required)"/>	Cluster UUID	path	string

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value
				<pre>{ "Name": "string", "Local": true }</pre>
	Parameter content type: application/json ▼			

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
201	OK	Model Example Value	
		<pre>{ "AuthID": "string", "Name": "string", "Local": true }</pre>	
401	Unauthorized		
404	Record not found		
Try it out!			

DELETE /2/clusters/{clusterID}/authz/{authID}

Delete authorization for a cluster

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterID	(required)	Cluster UUID	path	string
authID	(required)	Authorization UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
204			
401	Unauthorized		
404	Record not found		
Try it out!			

GET /2/clusters/{clusterUUID}/dashboard

[Get dashboard](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	OK		
404	Record not found		

default

[Try it out!](#)

GET /2/clusters/{clusterUUID}/env

[Get cluster environment](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	OK		
404	Record not found		

default

[Try it out!](#)

DELETE /2/clusters/{clusterUUID}/helmcharts/{HelmChartUUID}

[Delete helm chart for cluster](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
HelmChartUUID	<input type="text" value="(required)"/>	HelmChartUUID	path	string
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
204	Deleted helm chart successfully	Model Example Value	
		<pre>{ "helmchart_uuid": "string", "cluster_UUID": "string", "chart_url": "string", "name": "string", "options": "string" }</pre>	
401	Unauthorized		
404	HelmChart not found		

[Try it out!](#)

GET /2/clusters/{clusterUUID}/helmcharts

Get HelmCharts object for a given cluster

Response Class (Status 200)

HelmCharts found

Model | Example Value

```
{
  "helmchart_uuid": "string",
  "cluster_UUID": "string",
  "chart_url": "string",
  "name": "string",
  "options": "string"
}
```

Response Content Type ▼

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	HelmCharts not found		

HTTP Status Code	Reason	Response Model	Headers
default			

Try it out!

POST	/2/clusters/{clusterUUID}/helmcharts	Create a helmChart for cluster with the given specification		
Parameters				
Parameter	Value	Description	Parameter Type	Data Type
clusterUUID	(required)	Cluster UUID	path	string
body	(required)		body	Model Example Value
	Parameter content type: application/json ▼			<pre>{ "helmchart_uuid": "string", "cluster_UUID": "string", "chart_url": "string", "name": "string", "options": "string" }</pre>
Response Messages				
HTTP Status Code	Reason	Response Model	Headers	
200				
201	Created helmChart successfully	Model Example Value		
		<pre>{ "helmchart_uuid": "string", "cluster_UUID": "string", "chart_url": "string", "name": "string", "options": "string" }</pre>		
400	Bad request			
401	Unauthorized			

Try it out!

POST	/2/clusters/{clusterUUID}/nodepools	Create a node pool for a cluster		
Parameters				
Parameter	Value	Description	Parameter Type	Data Type

Parameter	Value	Description	Parameter Type	Data Type				
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string				
body	<input type="text" value="(required)"/> Parameter content type: <input type="text" value="application/json"/>		body	<table border="1"> <thead> <tr> <th>Model</th> <th>Example Value</th> </tr> </thead> <tbody> <tr> <td></td> <td> <pre>{ "name": "string", "size": 0, "labels": "string", "taints": "string", "vcpus": 0, "memory": 0, "template": "string" }</pre> </td> </tr> </tbody> </table>	Model	Example Value		<pre>{ "name": "string", "size": 0, "labels": "string", "taints": "string", "vcpus": 0, "memory": 0, "template": "string" }</pre>
Model	Example Value							
	<pre>{ "name": "string", "size": 0, "labels": "string", "taints": "string", "vcpus": 0, "memory": 0, "template": "string" }</pre>							

Response Messages

HTTP Status Code	Reason	Response Model	Headers				
200							
201	Created nodepool successfully	<table border="1"> <thead> <tr> <th>Model</th> <th>Example Value</th> </tr> </thead> <tbody> <tr> <td></td> <td> <pre>{ "NodePool": {} }</pre> </td> </tr> </tbody> </table>	Model	Example Value		<pre>{ "NodePool": {} }</pre>	
Model	Example Value						
	<pre>{ "NodePool": {} }</pre>						
400	Bad request						
401	Unauthorized						
404	Cluster not found						

[Try it out!](#)

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

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string
nodePoolID	<input type="text" value="(required)"/>	Node Pool ID	path	integer

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			

HTTP Status Code	Reason	Response Model	Headers
204	Deleted nodepool successfully	Model Example Value <pre>{}</pre>	
401	Unauthorized		
404	Cluster or NodePool not found		

[Try it out!](#)

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

Parameters

Parameter	Value	Description	Parameter Type	Data Type
clusterUUID	<input type="text" value="(required)"/>	Cluster UUID	path	string
nodePoolID	<input type="text" value="(required)"/>	Node Pool ID	path	integer
body	<input type="text" value="(required)"/>		body	Model Example Value <pre>{ "size": 0 }</pre>

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
204	Updated nodepool successfully	Model Example Value <pre>{}</pre>	
400	Bad request		
401	Unauthorized		
404	Cluster or NodePool not found		

[Try it out!](#)

2/ldap : List of ldap endpoints

Response Class (Status 200)

OK

Model | Example Value

```
{
  "Server": "string",
  "Port": 0,
  "BaseDN": "string",
  "ServiceAccountDN": "string",
  "ServiceAccountPassword": "string",
  "StartTLS": true,
  "InsecureSkipVerify": true
}
```

Response Content Type

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

default

Model | Example Value

```
{
  "Server": "string",
  "Port": 0,
  "BaseDN": "string",
  "ServiceAccountDN": "string",
  "ServiceAccountPassword": "string",
  "StartTLS": true,
  "InsecureSkipVerify": true
}
```

[Try it out!](#)

Response Class (Status 200)

OK

Model | Example Value

```
{
  "Server": "string",
  "Port": 0,
  "BaseDN": "string",
  "ServiceAccountDN": "string",
  "ServiceAccountPassword": "string",
}
```

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

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value
	Parameter content type: <input type="text" value="application/json"/>			<pre>{ "Server": "string", "Port": 0, "BaseDN": "string", "ServiceAccountDN": "string", "ServiceAccountPassword": "string", "StartTLS": true, "InsecureSkipVerify": true }</pre>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default		Model Example Value	
		<pre>{ "Server": "string", "Port": 0, "BaseDN": "string", "ServiceAccountDN": "string", "ServiceAccountPassword": "string", "StartTLS": true, "InsecureSkipVerify": true }</pre>	

[Try it out!](#)

GET /2/ldap/groups

[Get CX LDAP Groups](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
dn	<input type="text"/>	LDAP DN	query	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

HTTP Status Code	Reason	Response Model	Headers
200	OK		

default

[Try it out!](#)

POST /2/ldap/groups Create CX LDAP Group

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
201		Model Example Value	

```
{
  "LdapDN": "string",
  "Role": "string"
}
```

[Try it out!](#)

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

Response Class (Status 200)

Model	Example Value
	<pre>{ "LdapDN": "string", "Role": "string" }</pre>

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	<div style="border: 1px solid #ccc; padding: 5px; min-height: 80px;">(required)</div>		body	Model Example Value
	Parameter content type:			<div style="border: 1px solid #ccc; padding: 5px;"><pre>{ "LdapDN": "string", "Role": "string" }</pre></div>
	<input type="text" value="application/json"/>			

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default			
<input type="button" value="Try it out!"/>			

GET </2/ldap/groups/autHz> Get CX the cluster authorizations for a CX LDAP group

Parameters

Parameter	Value	Description	Parameter Type	Data Type
dn	<input type="text"/>	LDAP DN	query	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	OK		
default			
<input type="button" value="Try it out!"/>			

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

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
204			
<input type="button" value="Try it out!"/>			

2/license : List of licensing endpoints

DELETE /2/license/{resource}

[Refer to the smart licensing documentation](#)

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

200

Try it out!

GET /2/license/{resource}

[Refer to the smart licensing documentation](#)

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

200

Try it out!

DELETE /2/license/{resource}/{agentID}

[Refer to the smart licensing documentation](#)

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

200

Try it out!

GET /2/license/{resource}/{agentID}

[Refer to the smart licensing documentation](#)

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

200

Try it out!

POST /2/license/{resource}/{agentID}

[Refer to the smart licensing documentation](#)

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

HTTP Status Code

Reason

Response Model

Headers

200

Try it out!

2/aci_profiles : List of ACI profile endpoints

GET /2/aci_profiles

Get all ACI profiles

Response Class (Status 200)

ACI profiles found

Model | Example Value

```
{
  "uuid": "string",
  "name": "string",
  "apic_hosts": "string",
  "apic_username": "string",
  "apic_password": "string",
  "aci_vmm_domain_name": "string",
  "aci_infra_vlan_id": 0,
  "vrf_name": "string",
  "l3_outside_policy_name": "string",
  "l3_outside_network_name": "string",
  "aaep_name": "string",
  "nameservers": [
    "string"
  ],
  "aci_allocator": {
    "node_vlan_start": 0,
    "node_vlan_end": 0,
    "multicast_range": "string",
    "service_subnet_start": "string",
    "pod_subnet_start": "string"
  },
  "control_plane_contract_name": "string",
  "aci_tenant": "string"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
name	<input type="text"/>	search term for profile name	query	string

Parameter	Value	Description	Parameter Type	Data Type
offset	<input type="text"/>	Page start	query	long
limit	<input type="text"/>	Page size	query	long

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	No ACI profiles found		

default

Try it out!

POST /2/aci_profiles

Create an ACI profile with the given configuration

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value

Parameter content type:

application/json ▼

```

{
  "uuid": "string",
  "name": "string",
  "apic_hosts": "string",
  "apic_username": "string",
  "apic_password": "string",
  "aci_vmm_domain_name": "string",
  "aci_infra_vlan_id": 0,
  "vrf_name": "string",
  "l3_outside_policy_name": "string",
  "l3_outside_network_name": "string",
  "aaep_name": "string",
  "nameservers": [
    "string"
  ],
  "aci_allocator": {
    "node_vlan_start": 0,
    "node_vlan_end": 0,
    "multicast_range": "string",
    "service_subnet_start": "string",
    "pod_subnet_start": "string"
  },
  "control_plane_contract_name": "string",
  "aci_tenant": "string"
}

```

Response Messages

HTTP Status Code	Reason	Response Model	Headers				
200							
201	Created ACI profile successfully	<table border="1"> <thead> <tr> <th>Model</th> <th>Example Value</th> </tr> </thead> <tbody> <tr> <td></td> <td> <pre>{ "uuid": "string", "name": "string", "apic_hosts": "string", "apic_username": "string", "apic_password": "string", "aci_vmm_domain_name": "string", "aci_infra_vlan_id": 0, "vrf_name": "string", "l3_outside_policy_name": "string", "l3_outside_network_name": "string", "aaep_name": "string", "nameservers": ["string"], "aci_allocator": { "node_vlan_start": 0, "node_vlan_end": 0, "multicast_range": "string", "service_subnet_start": "string", "pod_subnet_start": "string" }, "control_plane_contract_name": "string", "aci_tenant": "string" }</pre> </td> </tr> </tbody> </table>	Model	Example Value		<pre>{ "uuid": "string", "name": "string", "apic_hosts": "string", "apic_username": "string", "apic_password": "string", "aci_vmm_domain_name": "string", "aci_infra_vlan_id": 0, "vrf_name": "string", "l3_outside_policy_name": "string", "l3_outside_network_name": "string", "aaep_name": "string", "nameservers": ["string"], "aci_allocator": { "node_vlan_start": 0, "node_vlan_end": 0, "multicast_range": "string", "service_subnet_start": "string", "pod_subnet_start": "string" }, "control_plane_contract_name": "string", "aci_tenant": "string" }</pre>	
Model	Example Value						
	<pre>{ "uuid": "string", "name": "string", "apic_hosts": "string", "apic_username": "string", "apic_password": "string", "aci_vmm_domain_name": "string", "aci_infra_vlan_id": 0, "vrf_name": "string", "l3_outside_policy_name": "string", "l3_outside_network_name": "string", "aaep_name": "string", "nameservers": ["string"], "aci_allocator": { "node_vlan_start": 0, "node_vlan_end": 0, "multicast_range": "string", "service_subnet_start": "string", "pod_subnet_start": "string" }, "control_plane_contract_name": "string", "aci_tenant": "string" }</pre>						
400	Bad request						
401	Unauthorized						

Try it out!

DELETE /2/aci_profiles/{aciProfileUUID}		Delete an ACI profile		
Parameters				
Parameter	Value	Description	Parameter Type	Data Type
aciProfileUUID	<input type="text" value="(required)"/>	ACI profile UUID	path	string
Response Messages				
HTTP Status Code	Reason	Response Model	Headers	
200				
204	Deleted ACI profile successfully			
401	Unauthorized			

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

404 ACI profile not found

Try it out!

PATCH /2/aci_profiles/{aciProfileUUID}

Update an ACI profile

Response Class (Status 200)

ACI profile updated successfully

Model | Example Value

```
{
  "uuid": "string",
  "name": "string",
  "apic_hosts": "string",
  "apic_username": "string",
  "apic_password": "string",
  "aci_vmm_domain_name": "string",
  "aci_infra_vlan_id": 0,
  "vrf_name": "string",
  "l3_outside_policy_name": "string",
  "l3_outside_network_name": "string",
  "aaep_name": "string",
  "nameservers": [
    "string"
  ],
  "aci_allocator": {
    "node_vlan_start": 0,
    "node_vlan_end": 0,
    "multicast_range": "string",
    "service_subnet_start": "string",
    "pod_subnet_start": "string"
  },
  "control_plane_contract_name": "string",
  "aci_tenant": "string"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

Parameter	Value	Description	Parameter Type	Data Type
body	<div style="border: 1px solid #ccc; padding: 5px; min-height: 80px;">(required)</div> <p>Parameter content type: <input type="text" value="application/json"/></p>		body	<div style="display: flex; border-bottom: 1px solid #ccc;"> <div style="flex: 1; border-right: 1px solid #ccc; padding-right: 5px;">Model</div> <div style="flex: 2; padding-left: 5px;">Example Value</div> </div> <pre style="border: 1px solid #ccc; padding: 10px; margin-top: 5px;"> { "uuid": "string", "name": "string", "apic_hosts": "string", "apic_username": "string", "apic_password": "string", "aci_vmm_domain_name": "string", "aci_infra_vlan_id": 0, "vrf_name": "string", "l3_outside_policy_name": "string", "l3_outside_network_name": "string", "aaep_name": "string", "nameservers": ["string"], "aci_allocator": { "node_vlan_start": 0, "node_vlan_end": 0, "multicast_range": "string", "service_subnet_start": "string", "pod_subnet_start": "string" }, "control_plane_contract_name": "string", "aci_tenant": "string" } </pre>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	ACI profile not found		

default

[Try it out!](#)

GET /2/aci_profiles/{aciProfileName}

[Get an ACI profile by name](#)

Response Class (Status 200)

ACI profile found

Model | Example Value

```

{
  "uuid": "string",
  "name": "string",
  "apic_hosts": "string",
  "apic_username": "string",

```



```

"apic_password": "string",
"aci_vmm_domain_name": "string",
"aci_infra_vlan_id": 0,
"vrf_name": "string",
"l3_outside_policy_name": "string",
"l3_outside_network_name": "string",
"aaep_name": "string",
"nameservers": [
  "string"
],
"aci_allocator": {
  "node_vlan_start": 0,
  "node_vlan_end": 0,
  "multicast_range": "string",
  "service_subnet_start": "string",
  "pod_subnet_start": "string"
},
"control_plane_contract_name": "string",
"aci_tenant": "string"
}

```

Response Content Type ▼

Parameters

Parameter	Value	Description	Parameter Type	Data Type
aciProfileName	<input type="text" value="(required)"/>	ACI profile name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Unauthorized		
404	ACI profile not found		

default

[Try it out!](#)

2/keyvalues : List of endpoints for key values

GET /2/keyvalues/{key}

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			

[Try it out!](#)

POST /2/keyvalues/{key}

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

200

Try it out!

2/aci_api : accessing ACI api

POST /2/aci_api/login

ACI login

Response Class (Status 200)

OK

Model | Example Value

```
{
  "token": "string"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

body

(required)

body

Model | Example Value

```
{
  "apic_ips": "string",
  "apic_username": "string",
  "apic_password": "string"
}
```

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

default

Try it out!

v3 : CCP v3 API (alpha)

GET /v3/{resource}

forwards v3 API requests to the v3 API service

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

200

Try it out!

2/localusers

GET /2/localusers

Get CX local users

Parameters

Parameter	Value	Description	Parameter Type	Data Type
name	<input type="text"/>	User Name	query	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

200 OK

default

Try it out!

POST /2/localusers

Create CX local user

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Example Value

Parameter content type:

application/json ▼

```
{
  "Token": "string",
  "UserName": "string",
  "FirstName": "string",
  "LastName": "string",
  "Password": "string",
  "Disable": true,
  "Role": "string"
}
```

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

HTTP Status Code	Reason	Response Model	Headers				
200							
201		<table border="1"> <thead> <tr> <th>Model</th> <th>Example Value</th> </tr> </thead> <tbody> <tr> <td></td> <td><code>{}</code></td> </tr> </tbody> </table>	Model	Example Value		<code>{}</code>	
Model	Example Value						
	<code>{}</code>						

[Try it out!](#)

DELETE [/2/localusers/{username}](#) Delete a local user

Parameters

Parameter	Value	Description	Parameter Type	Data Type
username	<input type="text" value="(required)"/>	User Name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200			
204			

[Try it out!](#)

PATCH [/2/localusers/{username}](#) Update a local user. Can provide either or both parameters.

Response Class (Status 200)

OK

Model	Example Value
	<pre>{ "FirstName": "string", "LastName": "string", "Password": "string", "Disable": true, "Role": "string" }</pre>

Response Content Type ▼

Parameters

Parameter	Value	Description	Parameter Type	Data Type
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Parameter	Value	Description	Parameter Type	Data Type
username	<input type="text" value="(required)"/>	User Name	path	string
body	<div style="border: 1px solid gray; padding: 5px; min-height: 100px;">(required)</div>		body	Model Example Value

Parameter content type:

```
{
  "FirstName": "string",
  "LastName": "string",
  "Password": "string",
  "Disable": true,
  "Role": "string"
}
```

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default			

Try it out!

2/rbac

GET </2/rbac> get the role of the current user

Response Class (Status 200)

OK

Model | Example Value

```
{
  "role": "string"
}
```

Response Content Type

Response Messages

HTTP Status Code	Reason	Response Model	Headers
401	Not Authorized		
404	Not Found		

default

Try it out!