
Django Kubernetes Manager

Release 0.1.0

Bradley Reimers

Apr 27, 2020

CONTENTS

1	Introduction	3
2	Table of Contents	5
2.1	Getting Started	5
2.1.1	Quickstart	5
2.1.2	Sample Use-cases	6
2.2	Models	8
2.2.1	Base Models	8
2.2.2	Kubernetes Models	12
2.2.3	Kubernetes Model-Mixins	28
2.2.4	Target Cluster Model	30
2.3	Serializers	33
2.3.1	API Serializers	33
2.4	Views	36
2.4.1	API Views	36
2.5	Utils	40
2.5.1	Kubernetes Utils	40
2.6	API Spec	40
2.6.1	clusters	40
2.6.2	configmaps	42
2.6.3	containers	45
2.6.4	deployments	48
2.6.5	ingresses	53
2.6.6	jobs	57
2.6.7	mounts	62
2.6.8	namespaces	64
2.6.9	Pods	67
2.6.10	services	70
2.6.11	volumes	74
3	Indices and tables	77
	Python Module Index	79
	HTTP Routing Table	81
	Index	83



Kubernetes Manager

django + k8s for the win

Django Kubernetes Manager is an open source project to wrap the complexity of Kubernetes management in the simplicity of Django Rest Framework.

Documentation is (mostly) autogenerated, so if you notice anything that should be changed or added, please create a PR

INTRODUCTION

Our engineering team has developed several data processing apps, and found celery wasn't quite enough for dispatching heavier tasks. We decided to try Kubernetes Jobs, and while pleased with performance, wanted a less verbose, more object oriented way to interact with our clusters.

And thus Django Kubernetes Manager was spawned. Using Django Rest Framework and the kubernetes client library, our devs came up with the idea to treat each object we'd be deploying as a Model instance, and use the DRF viewsets and actions to create an RESTful API framework from which we could extend for each projects particular needs.

TABLE OF CONTENTS

2.1 Getting Started

2.1.1 Quickstart

- Install from PyPi

```
pip install django-kubernetes-manager
```

- In settings.py (or module) add the app

```
INSTALLED_APPS = [  
    ... ,  
    rest_framework,  
    kubernetes_manager,  
]
```

- In urls.py include the package urls

```
urlpatterns = [  
    ... ,  
    path('dkm/', include('kubernetes_manager.urls')),  
]
```

- Run migrations and start server

```
./manage.py migrate  
./manage.py runserver
```

- Navigate to django admin and create a TargetCluster
- Sample request

```
curl http://127.0.0.1:8000/dkm/api/namespaces/?format=json
```

```
[  
  {  
    "title": "veridian-dynamics-aerodynamic-bagels",  
    "description": null,  
    "cluster": "http://127.0.0.1:8000/dkm/api/clusters/1/?format=json",  
    "config": {},  
    "labels": {  
      "project": "aerodynamic-bagels",
```

(continues on next page)

(continued from previous page)

```

    "organization": "veridian-dynamics"
  },
  "annotations": {},
  "api_version": "v1",
  "kind": "Namespace",
  "exists": true
}
]

```

2.1.2 Sample Use-cases

- Creating a labelled namespace for a client project:

```

from kubernetes_manager.models import KubernetesNamespace, TargetCluster
from django.db import models
from django_extensions.models import TitleDescriptionModel

class AppNamespace(TitleDescriptionModel):
    project = models.OneToOneField("client.Project", on_delete=models.CASCADE)
    organization = models.ForeignKey("client.Org", on_delete=models.CASCADE)
    cluster = models.ForeignKey("kubernetes_manager.TargetCluster", on_delete=models.
↳CASCADE)
    namespace = models.ForeignKey("kubernetes_manager.KubernetesNamespace", null=True,
↳blank=True, on_delete=models.CASCADE)
    status = models.CharField(max_length = 128, null=True, blank=True)

    def save(self, *args, **kwargs):
        if not self.status == '{"phase": "Active"}':
            self.namespace = KubernetesNamespace.objects.create(
                title = "ns-" + self.organization.slug + "-" + self.project.slug,
                cluster = self.cluster,
                labels = {"organization":self.organization.slug, "project": self.
↳project.slug},
                kind = "Namespace"
            )
            self.status = self.namespace.deploy()
            super().save(*args, **kwargs)

    def remove(self, *args, **kwargs):
        self.status = self.namespace.k_delete()

    def delete(self, *args, **kwargs):
        self.remove()
        super().delete(*args, **kwargs)

```

- Creating a two-container deployment:

```

from kubernetes_manager.models import KubernetesNamespace, TargetCluster
from django.db import models
from django_extensions.models import TitleDescriptionModel

from .ns import AppNamespace

class FileServer(TitleDescriptionModel):
    name = models.CharField(max_length=128)

```

(continues on next page)

(continued from previous page)

```

organization = models.ForeignKey("client.Org", on_delete=models.CASCADE)
project = models.ForeignKey("client.Project", on_delete=models.CASCADE)
cluster = models.ForeignKey("kubernetes_manager.TargetCluster", on_delete=models.
↪CASCADE)
namespace = models.ForeignKey(AppNamespace, on_delete=models.CASCADE)
file = models.ForeignKey("library.FileItem", on_delete=models.CASCADE)
docker_image = models.CharField(max_length=256, help_text="Docker repo path for_
↪image")
docker_tag = models.CharField(max_length=16, help_text="Docker tag for image")
definition = JSONField(null=True, blank=True)

# define volume
def vol(self, *args, **kwargs):
    volume = KubernetesVolume.objects.create(
        title = self.name + "-vol",
        cluster = self.cluster
    )
    return volume

# create primary container
def container_spec(self, *args, **kwargs):
    container = KubernetesContainer.objects.create(
        title = self.name,
        cluster = self.cluster,
        image_name = self.docker_image,
        image_tag = self.docker_tag,
        volume_mount = KubernetesVolumeMount.objects.create(
            title = self.name + "-vol",
            cluster = self.cluster
        ) if not kwargs.get("mount", None) else kwargs.get("mount"),
        command = "ls",
        args = "/media"
    )
    return container

# create download sidecar
def sidecar_spec(self, *args, **kwargs):
    sidecar = KubernetesContainer.objects.create(
        title = self.name,
        cluster = self.cluster,
        image_name = "curlimages/curl",
        image_tag = "7.69.1",
        volume_mount = KubernetesVolumeMount.objects.create(
            title = self.name + "-vol",
            cluster = self.cluster
        ) if not kwargs.get("mount", None) else kwargs.get("mount"),
        command = "/bin/sh",
        args = '-c,curl -oL {} {}'.format(self.file.name, self.file.url)
    )
    return sidecar

# create pod template
def pod_template_spec(self, *args, **kwargs):
    volume_mount = KubernetesVolumeMount.objects.create(
        title = self.name + "-vol",
        cluster = self.cluster
    )

```

(continues on next page)

```

    pod = KubernetesPodTemplate.objects.create(
        title = self.name,
        cluster = self.cluster,
        volume = self.vol(),
        primary_container = self.container_spec(mount=volume_mount),
        secondary_container = self.sidecar_spec(mount=volume_mount),
        restart_policy = "Always",
        labels = {"project": self.project.slug}
    )
    return pod

# tie it up and deploy
def deploy(self):
    pod = self.pod_template_spec()
    deployment = KubernetesDeployment.objects.create(
        title = self.name,
        cluster = self.cluster,
        api_version = "apps/v1",
        kind = "Deployment",
        namespace = self.namespace.namespace.slug,
        labels = {"project": self.project.slug},
        selector = {"project": self.project.slug},
        pod_template = pod
    )
    self.definition = deployment.get_obj().to_dict()
    self.save()
    return deployment.deploy()

```

2.2 Models

2.2.1 Base Models

class `kubernetes_manager.models.base.KubernetesBase` (*args, **kwargs)
 Bases: `django_extensions.db.models.TitleSlugDescriptionModel`

Type model (abstract)

Description Base parent model that all subsequent models inherit from.

Inherits `django_extensions.db.models.TitleSlugDescriptionModel`

Fields id, cluster, config, deployed, deleted

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.

- **removed** (*DateTimeField*) – Time when object is removed from cluster.

class Meta

Bases: object

abstract = False**cluster**

Accessor to the related object on the forward side of a many-to-one or one-to-one (via ForwardOneToOneDescriptor subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

cluster_id**config**

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

deployed

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

get_client (*API*=<class 'kubernetes.client.apis.core_v1_api.CoreV1Api'>, ****kwargs**)

Gets a k8s api client

Args: API (client.<type>) - Kubernetes Client Type

Returns: object of type <API>

id

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

removed

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

slugify_function (*content*)

Description Overrides default slugify with custom logic.

class kubernetes_manager.models.base.KubernetesMetadataObjBase (**args*, ****kwargs**)

Bases: *kubernetes_manager.models.base.KubernetesBase*

Type model (abstract)

Description Extends KubernetesBase to include metadata fields.

Inherits kubernetes_manager.models.base.KubernetesBase

Fields labels, annotations

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug

- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API

class Meta

Bases: object

abstract = False

annotations

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via ForwardOneToOneDescriptor subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

labels

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

class `kubernetes_manager.models.base.KubernetesNetworkingBase` (*args, **kwargs)

Bases: `kubernetes_manager.models.base.KubernetesMetadataObjBase`

Type model (abstract)

Description Extends KubernetesMetadataObjBase to include network fields.

Inherits `kubernetes_manager.models.base.KubernetesMetadataObjBase`

Fields labels, annotations

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.

- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **api_version** (*CharField*) – API version used to deploy child object.
- **kind** (*CharField*) – String representation of Kubernetes object kind
- **port** (*IntegerField*) – Port object will expose
- **namespace_id** (*ForeignKey*) – Live namespace the object is associated with.
- **kuid** (*CharField*) – Object’s UID in the cluster

class Meta

Bases: object

abstract = False**api_version**

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via *ForwardOneToOneDescriptor* subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a *ForwardManyToOneDescriptor* instance.

kind

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

kuid

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

namespace

Accessor to the related object on the forward side of a many-to-one or one-to-one (via *ForwardOneToOneDescriptor* subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a *ForwardManyToOneDescriptor* instance.

namespace_id**port**

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

2.2.2 Kubernetes Models

class `kubernetes_manager.models.kube.KubernetesConfigMap` (*args, **kwargs)

Bases: `kubernetes_manager.models.base.KubernetesMetadataObjBase`

Type model

Description Holds data related to a kubernetes volume mount.

Inherits `kubernetes_manager.models.base.KubernetesMetadataObjBase`

Fields `kind`, `data`, `binary`, `override_name`, `namespace`

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **kind** (*CharField*) – Kind
- **data** (*JSONField*) – Data
- **binary** (*BinaryField*) – Binary
- **override_name** (*CharField*) – Override name
- **namespace_id** (*ForeignKey*) – Namespace

exception `DoesNotExist`

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception `MultipleObjectsReturned`

Bases: `django.core.exceptions.MultipleObjectsReturned`

binary

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

data

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

deploy ()

Description Deploy configmap obj.

get_obj ()

Description Generate configmap spec.

kind

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

namespace

Accessor to the related object on the forward side of a many-to-one or one-to-one (via ForwardOneToOneDescriptor subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

namespace_id

objects = <django.db.models.manager.Manager object>

override_name

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

remove ()

Description Delete configmap from namespace.

class kubernetes_manager.models.kube.KubernetesContainer (*args, **kwargs)

Bases: *kubernetes_manager.models.base.KubernetesBase*

Type model

Description Holds data related to a kubernetes containr.

Inherits kubernetes_manager.models.base.KubernetesBase

Fields image_name, image_tag, image_pull_policy, command, args, port, volume_mount

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.

- **image_name** (*CharField*) – Properly qualified image name.
- **image_tag** (*CharField*) – Tag name for the image to be used for this job
- **image_pull_policy** (*CharField*) – Image pull policy
- **command** (*TextField*) – Command to run when start container
- **args** (*TextField*) – Comma separated args to run with command when instantiating container.
- **port** (*IntegerField*) – Port to expose.
- **volume_mounts** (*ManyToManyField*) – Mounts for any number of volumes

exception DoesNotExist

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception MultipleObjectsReturned

Bases: `django.core.exceptions.MultipleObjectsReturned`

args

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

command

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

get_image_pull_policy_display (*, *field=<django.db.models.fields.CharField: image_pull_policy>*)

get_obj ()

Description Generate container spec.

image_name

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

image_pull_policy

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

image_tag

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

kubernetespodtemplate_set

Accessor to the related objects manager on the forward and reverse sides of a many-to-many relation.

In the example:

```
class Pizza(Model):
    toppings = ManyToManyField(Topping, related_name='pizzas')
```

`Pizza.toppings` and `Topping.pizzas` are `ManyToManyDescriptor` instances.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

objects = <django.db.models.manager.Manager object>

port

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

volume_mounts

Accessor to the related objects manager on the forward and reverse sides of a many-to-many relation.

In the example:

```
class Pizza(Model):
    toppings = ManyToManyField(Topping, related_name='pizzas')
```

`Pizza.toppings` and `Topping.pizzas` are `ManyToManyDescriptor` instances.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

```
class kubernetes_manager.models.kube.KubernetesDeployment(*args, **kwargs)
    Bases: kubernetes_manager.models.base.KubernetesNetworkingBase,
           kubernetes_manager.models.mixins.KubernetesTelemetryMixin
```

Type model

Description Holds data related to a kubernetes deployment.

Inherits `kubernetes_manager.models.base.KubernetesNetworkingBase`, `kuber-`
`netes_manager.models.base.KubernetesTelemetryMixin`

Fields selector, replicas, pod_template

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **api_version** (*CharField*) – API version used to deploy child object.
- **kind** (*CharField*) – String representation of Kubernetes object kind

- **port** (*IntegerField*) – Port object will expose
- **namespace_id** (*ForeignKey*) – Live namespace the object is associated with.
- **kuid** (*CharField*) – Object’s UID in the cluster
- **object_status** (*CharField*) – status of the object in Kubernetes
- **average_cpu_usage** (*DecimalField*) – Average PIT CPU units consumed
- **average_mem_usage** (*IntegerField*) – Average PIT bytes consumed
- **cpu_usage_seconds** (*DecimalField*) – Average cpu usage * seconds live
- **mem_usage_seconds** (*IntegerField*) – Average mem usage * seconds live
- **selector** (*JSONField*) – Selector
- **replicas** (*IntegerField*) – Replicas
- **pod_template_id** (*ForeignKey*) – Pod template

exception DoesNotExist

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception MultipleObjectsReturned

Bases: `django.core.exceptions.MultipleObjectsReturned`

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

deploy()

Description Deploy deployment obj.

get_obj()

Description Generate Deployment spec.

namespace

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

objects = <django.db.models.manager.Manager object>

pod_template

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

pod_template_id

remove ()

Description Remove deployment from namespace.

replicas

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

selector

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

class kubernetes_manager.models.kube.**KubernetesIngress** (*args, **kwargs)

Bases: *kubernetes_manager.models.base.KubernetesNetworkingBase*

Type model

Description Holds data related to a kubernetes ingress.

Inherits kubernetes_manager.models.base.KubernetesNetworkingBase

Fields hostname, path, target_service

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **api_version** (*CharField*) – API version used to deploy child object.
- **kind** (*CharField*) – String representation of Kubernetes object kind
- **port** (*IntegerField*) – Port object will expose
- **namespace_id** (*ForeignKey*) – Live namespace the object is associated with.
- **kuid** (*CharField*) – Object's UID in the cluster
- **hostname** (*CharField*) – Hostname
- **path** (*CharField*) – Path
- **target_service_id** (*ForeignKey*) – Target service

exception DoesNotExist

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception MultipleObjectsReturned

Bases: `django.core.exceptions.MultipleObjectsReturned`

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

deploy()

Description Deploy ingress to ns.

get_obj()

Description Generate ingress obj.

hostname

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

namespace

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

objects = <django.db.models.manager.Manager object>

path

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

remove()

Description Remove ingress from ns.

target_service

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

target_service_id

```
class kubernetes_manager.models.kube.KubernetesJob (*args, **kwargs)
    Bases: kubernetes_manager.models.base.KubernetesNetworkingBase,
           kubernetes_manager.models.mixins.KubernetesTelemetryMixin
```

Type model

Description Holds data related to a kubernetes pod spec.

Inherits *kubernetes_manager.models.base.KubernetesNetworkingBase*, *kuber-*
netes_manager.models.base.KubernetesTelemetryMixin

Fields selector, replicas, pod_template

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **api_version** (*CharField*) – API version used to deploy child object.
- **kind** (*CharField*) – String representation of Kubernetes object kind
- **port** (*IntegerField*) – Port object will expose
- **namespace_id** (*ForeignKey*) – Live namespace the object is associated with.
- **kuid** (*CharField*) – Object’s UID in the cluster
- **object_status** (*CharField*) – status of the object in Kubernetes
- **average_cpu_usage** (*DecimalField*) – Average PIT CPU units consumed
- **average_mem_usage** (*IntegerField*) – Average PIT bytes consumed
- **cpu_usage_seconds** (*DecimalField*) – Average cpu usage * seconds live
- **mem_usage_seconds** (*IntegerField*) – Average mem usage * seconds live
- **pod_template_id** (*ForeignKey*) – Pod template
- **backoff_limit** (*IntegerField*) – Backoff limit

exception DoesNotExist

Bases: *django.core.exceptions.ObjectDoesNotExist*

exception MultipleObjectsReturned

Bases: *django.core.exceptions.MultipleObjectsReturned*

backoff_limit

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via ForwardOneToOneDescriptor subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

deploy()

Description Deploy job to ns.

get_obj()

Description Generate job spec.

namespace

Accessor to the related object on the forward side of a many-to-one or one-to-one (via ForwardOneToOneDescriptor subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

objects = <django.db.models.manager.Manager object>

pod_template

Accessor to the related object on the forward side of a many-to-one or one-to-one (via ForwardOneToOneDescriptor subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

pod_template_id

remove()

Description Remove job from ns.

class kubernetes_manager.models.kube.**KubernetesNamespace** (*args, **kwargs)

Bases: *kubernetes_manager.models.base.KubernetesMetadataObjBase*

Type model

Description Holds data related to a Kubernetes namespace.

Inherits kubernetes_manager.models.base.KubernetesBase

Fields api_version, kind, exists

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description

- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **api_version** (*CharField*) – Api version
- **kind** (*CharField*) – Kind
- **exists** (*BooleanField*) – Exists

exception DoesNotExist

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception MultipleObjectsReturned

Bases: `django.core.exceptions.MultipleObjectsReturned`

api_version

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

deploy()

Description Deploy namespace obj.

exists

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

get_obj()

Description Generate namespace spec.

kind

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

kubernetesconfigmap_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kubernetesdeployment_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kubernetesingress_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kubernetesjob_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kubernetesservice_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

objects = <django.db.models.manager.Manager object>

remove ()

Description Delete namespace from cluster.

class `kubernetes_manager.models.kube.KubernetesPodTemplate` (*args, **kwargs)

Bases: `kubernetes_manager.models.base.KubernetesMetadataObjBase`

Type model

Description Holds data related to a kubernetes pod spec.

Inherits `kubernetes_manager.models.base.KubernetesMetadataObjBase`

Fields `volume`, `primary_container`, `secondary_container`, `restart_policy`

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **restart_policy** (*CharField*) – How the pod should handle restart om case of failures
- **volumes** (*ManyToManyField*) – All volumes to be created for a pod.
- **containers** (*ManyToManyField*) – All containers to be included in a pod.

exception `DoesNotExist`

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception `MultipleObjectsReturned`

Bases: `django.core.exceptions.MultipleObjectsReturned`

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

containers

Accessor to the related objects manager on the forward and reverse sides of a many-to-many relation.

In the example:

```
class Pizza(Model):
    toppings = ManyToManyField(Topping, related_name='pizzas')
```

`Pizza.toppings` and `Topping.pizzas` are `ManyToManyDescriptor` instances.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

get_obj()

Description Generate pod spec.

get_restart_policy_display (*, field=<django.db.models.fields.CharField: restart_policy>)

kubernetesdeployment_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Parent.children` is a `ReverseManyToOneDescriptor` instance.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

kubernetesjob_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Parent.children` is a `ReverseManyToOneDescriptor` instance.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

objects = <django.db.models.manager.Manager object>

restart_policy

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

volumes

Accessor to the related objects manager on the forward and reverse sides of a many-to-many relation.

In the example:

```
class Pizza(Model):
    toppings = ManyToManyField(Topping, related_name='pizzas')
```

`Pizza.toppings` and `Topping.pizzas` are `ManyToManyDescriptor` instances.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

class `kubernetes_manager.models.kube.KubernetesService` (*args, **kwargs)

Bases: `kubernetes_manager.models.base.KubernetesNetworkingBase`

Type model

Description Holds data related to a kubernetes service.

Inherits `kubernetes_manager.models.base.KubernetesNetworkingBase`

Fields `selector`, `target_port`

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.
- **labels** (*JSONField*) – Dictionary store equivalent to Labels in Kubernetes API
- **annotations** (*JSONField*) – Dictionary store equivalent to Annotations in Kubernetes API
- **api_version** (*CharField*) – API version used to deploy child object.
- **kind** (*CharField*) – String representation of Kubernetes object kind
- **port** (*IntegerField*) – Port object will expose
- **namespace_id** (*ForeignKey*) – Live namespace the object is associated with.
- **kuid** (*CharField*) – Object’s UID in the cluster
- **selector** (*JSONField*) – Selector
- **target_port** (*IntegerField*) – Target port

exception DoesNotExist

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception MultipleObjectsReturned

Bases: `django.core.exceptions.MultipleObjectsReturned`

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

deploy()

Description Deploy service to ns.

get_obj()

Description Generate service spec.

kubernetesingress_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

namespace

Accessor to the related object on the forward side of a many-to-one or one-to-one (via ForwardOneToOneDescriptor subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Child.parent is a ForwardManyToOneDescriptor instance.

objects = <django.db.models.manager.Manager object>

remove ()

Description Remove service from ns.

selector

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

target_port

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

class kubernetes_manager.models.kube.**KubernetesVolume** (*args, **kwargs)

Bases: *kubernetes_manager.models.base.KubernetesBase*

Type model

Description Holds data related to a kubernetes volume.

Inherits kubernetes_manager.models.base.KubernetesBase

Fields

•

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – ForeignKey to TargetCluster object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.

- **removed** (*DateTimeField*) – Time when object is removed from cluster.

exception DoesNotExist

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception MultipleObjectsReturned

Bases: `django.core.exceptions.MultipleObjectsReturned`

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

get_obj()

Description Generate volume spec.

kubernetespodtemplate_set

Accessor to the related objects manager on the forward and reverse sides of a many-to-many relation.

In the example:

```
class Pizza(Model):
    toppings = ManyToManyField(Topping, related_name='pizzas')
```

`Pizza.toppings` and `Topping.pizzas` are `ManyToManyDescriptor` instances.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

objects = <django.db.models.manager.Manager object>

class `kubernetes_manager.models.kube.KubernetesVolumeMount` (*args, **kwargs)

Bases: `kubernetes_manager.models.base.KubernetesBase`

Type model

Description Holds data related to a kubernetes volume mount.

Inherits `kubernetes_manager.models.base.KubernetesBase`

Fields `mount_path`, `sub_path`

Parameters

- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **id** (*UUIDField*) – UUID Auto field.
- **cluster_id** (*ForeignKey*) – `ForeignKey` to `TargetCluster` object.
- **config** (*JSONField*) – Pass in extra parameters here.
- **deployed** (*DateTimeField*) – Time when object is applied to cluster.
- **removed** (*DateTimeField*) – Time when object is removed from cluster.

- `mount_path` (*CharField*) – Mount path
- `sub_path` (*CharField*) – Sub path

exception DoesNotExist

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception MultipleObjectsReturned

Bases: `django.core.exceptions.MultipleObjectsReturned`

cluster

Accessor to the related object on the forward side of a many-to-one or one-to-one (via `ForwardOneToOneDescriptor` subclass) relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Child.parent` is a `ForwardManyToOneDescriptor` instance.

get_obj()

Description Generate mount spec.

kubernetescontainer_set

Accessor to the related objects manager on the forward and reverse sides of a many-to-many relation.

In the example:

```
class Pizza(Model):
    toppings = ManyToManyField(Topping, related_name='pizzas')
```

`Pizza.toppings` and `Topping.pizzas` are `ManyToManyDescriptor` instances.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

mount_path

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

objects = <django.db.models.manager.Manager object>

sub_path

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

2.2.3 Kubernetes Model-Mixins

```
class kubernetes_manager.models.mixins.KubernetesTelemetryMixin(*args,
                                                                **kwargs)
```

Bases: `django.db.models.base.Model`

Type mixin

Description Extends child model to include telemetry features.

Inherits `django.db.models.Model`

Fields `object_status`, `average_cpu_usage`, `average_mem_usage`, `cpu_usage_seconds`,
`mem_usage_seconds`

Parameters

- **object_status** (*CharField*) – status of the object in Kubernetes
- **average_cpu_usage** (*DecimalField*) – Average PIT CPU units consumed
- **average_mem_usage** (*IntegerField*) – Average PIT bytes consumed
- **cpu_usage_seconds** (*DecimalField*) – Average cpu usage * seconds live
- **mem_usage_seconds** (*IntegerField*) – Average mem usage * seconds live

class Meta

Bases: `object`

abstract = `False`

average_cpu_usage

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

average_mem_usage

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

cpu_usage_seconds

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

mem_usage_seconds

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

object_status

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

parseSize (*size*)

Description Parses string as numeric, suffix and converts to bytes.

read_pod_metrics ()

Description Uses `metrics_server` to get cadvisor data.

read_pod_usage ()

Description Converts metrics into dictionary for api usage.

splitNumeric (*size*)

Description Parses string into numeric component.

status ()

Description Returns status data of object.

2.2.4 Target Cluster Model

class `kubernetes_manager.models.target_cluster.TargetCluster` (*args, **kwargs)
Bases: `django_extensions.db.models.TitleSlugDescriptionModel`

Type `model`

Description Holds data related to a cluster context.

Inherits `django_extensions.db.models.TitleSlugDescriptionModel`

Fields `api_endpoint`, `telemetry_endpoint`, `telemetry_source`, `config`

Parameters

- **id** (*AutoField*) – Id
- **title** (*CharField*) – Title
- **description** (*TextField*) – Description
- **slug** (*AutoSlugField*) – Slug
- **api_endpoint** (*URLField*) – Cluster Endpoint URL
- **telemetry_endpoint** (*URLField*) – Telemetry Endpoint URL
- **telemetry_source** (*CharField*) – Telemetry source
- **config** (*JSONField*) – Equivalent to `.kube/config` but all JSON

exception `DoesNotExist`

Bases: `django.core.exceptions.ObjectDoesNotExist`

exception `MultipleObjectsReturned`

Bases: `django.core.exceptions.MultipleObjectsReturned`

classmethod `add` (*kubeconfig*)

Class method to a new `TargetCluster`

Args: `kubeconfig` (str) - string contents of `kubeconfig` file

Returns: `list(TargetCluster)`

api_endpoint

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

config

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

get_telemetry_source_display (*, *field=<django.db.models.fields.CharField: telemetry_source>*)

id

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

kubernetesconfigmap_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Parent.children` is a `ReverseManyToOneDescriptor` instance.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

kubernetescontainer_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Parent.children` is a `ReverseManyToOneDescriptor` instance.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

kubernetesdeployment_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Parent.children` is a `ReverseManyToOneDescriptor` instance.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

kubernetesingress_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Parent.children` is a `ReverseManyToOneDescriptor` instance.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

kubernetesjob_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

`Parent.children` is a `ReverseManyToOneDescriptor` instance.

Most of the implementation is delegated to a dynamically defined manager class built by `create_forward_many_to_many_manager()` defined below.

kubernetesnamespace_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kubernetespodtemplate_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kuberneteservice_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kubernetesvolume_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

kubernetesvolumemount_set

Accessor to the related objects manager on the reverse side of a many-to-one relation.

In the example:

```
class Child(Model):
    parent = ForeignKey(Parent, related_name='children')
```

Parent.children is a ReverseManyToOneDescriptor instance.

Most of the implementation is delegated to a dynamically defined manager class built by create_forward_many_to_many_manager() defined below.

objects = <django.db.models.manager.Manager object>

telemetry_endpoint

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

telemetry_source

A wrapper for a deferred-loading field. When the value is read from this object the first time, the query is executed.

2.3 Serializers

2.3.1 API Serializers

```
class kubernetes_manager.serializers.base.KubernetesBaseSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
```

Bases: `rest_framework.serializers.HyperlinkedModelSerializer`

class Meta

Bases: `object`

abstract = `True`

fields = `['title', 'description', 'cluster', 'config']`

model

alias of `kubernetes_manager.models.base.KubernetesBase`

```
class kubernetes_manager.serializers.base.KubernetesConfigMapSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
```

Bases: `kubernetes_manager.serializers.base.KubernetesMetadataObjBaseSerializer`

class Meta

Bases: `object`

fields = `['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'data']`

model

alias of `kubernetes_manager.models.kube.KubernetesConfigMap`

```
class kubernetes_manager.serializers.base.KubernetesContainerSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
```

Bases: `kubernetes_manager.serializers.base.KubernetesBaseSerializer`

class Meta

Bases: `object`

fields = `['title', 'description', 'cluster', 'config', 'image_name', 'image_tag', 'image_digest']`

model

alias of `kubernetes_manager.models.kube.KubernetesContainer`

```
class kubernetes_manager.serializers.base.KubernetesDeploymentSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
Bases: kubernetes_manager.serializers.base.KubernetesNetworkingBaseSerializer

class Meta
    Bases: object
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'ap
    model
        alias of kubernetes_manager.models.kube.KubernetesDeployment

class kubernetes_manager.serializers.base.KubernetesIngressSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
Bases: kubernetes_manager.serializers.base.KubernetesNetworkingBaseSerializer

class Meta
    Bases: object
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'ap
    model
        alias of kubernetes_manager.models.kube.KubernetesIngress

class kubernetes_manager.serializers.base.KubernetesJobSerializer (*args: Any,
                                                                    **kwargs:
                                                                    Any)
Bases: kubernetes_manager.serializers.base.KubernetesNetworkingBaseSerializer

class Meta
    Bases: object
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'ap
    model
        alias of kubernetes_manager.models.kube.KubernetesJob

class kubernetes_manager.serializers.base.KubernetesMetadataObjBaseSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
Bases: kubernetes_manager.serializers.base.KubernetesBaseSerializer

class Meta
    Bases: object
    abstract = True
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations']
    model
        alias of kubernetes_manager.models.base.KubernetesMetadataObjBase
```

```

class kubernetes_manager.serializers.base.KubernetesNamespaceSerializer (*args:
    Any,
    **kwargs:
    Any)
Bases: kubernetes_manager.serializers.base.KubernetesMetadataObjBaseSerializer

class Meta
    Bases: object
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'ap
    model
        alias of kubernetes_manager.models.kube.KubernetesNamespace

class kubernetes_manager.serializers.base.KubernetesNetworkingBaseSerializer (*args:
    Any,
    **kwargs:
    Any)
Bases: kubernetes_manager.serializers.base.KubernetesMetadataObjBaseSerializer

class Meta
    Bases: object
    abstract = True
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'ap
    model
        alias of kubernetes_manager.models.base.KubernetesNetworkingBase

class kubernetes_manager.serializers.base.KubernetesPodTemplateSerializer (*args:
    Any,
    **kwargs:
    Any)
Bases: kubernetes_manager.serializers.base.KubernetesMetadataObjBaseSerializer

class Meta
    Bases: object
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'vo
    model
        alias of kubernetes_manager.models.kube.KubernetesPodTemplate

class kubernetes_manager.serializers.base.KubernetesServiceSerializer (*args:
    Any,
    **kwargs:
    Any)
Bases: kubernetes_manager.serializers.base.KubernetesNetworkingBaseSerializer

class Meta
    Bases: object
    fields = ['title', 'description', 'cluster', 'config', 'labels', 'annotations', 'ap
    model
        alias of kubernetes_manager.models.kube.KubernetesService

```

```
class kubernetes_manager.serializers.base.KubernetesVolumeMountSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)

Bases: kubernetes_manager.serializers.base.KubernetesBaseSerializer

class Meta
    Bases: object

    fields = ['title', 'description', 'cluster', 'config', 'mount_path', 'sub_path']

    model
        alias of kubernetes_manager.models.kube.KubernetesVolumeMount

class kubernetes_manager.serializers.base.KubernetesVolumeSerializer (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)

Bases: kubernetes_manager.serializers.base.KubernetesBaseSerializer

class Meta
    Bases: object

    fields = ['title', 'description', 'cluster', 'config']

    model
        alias of kubernetes_manager.models.kube.KubernetesVolume

class kubernetes_manager.serializers.base.TargetClusterSerializer (*args: Any,
                                                                    **kwargs:
                                                                    Any)

Bases: rest_framework.serializers.HyperlinkedModelSerializer

class Meta
    Bases: object

    fields = ['title', 'api_endpoint', 'telemetry_endpoint', 'config']

    model
        alias of kubernetes_manager.models.target_cluster.TargetCluster
```

2.4 Views

2.4.1 API Views

```
class kubernetes_manager.views.model_views.KubernetesConfigMapViewSet (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)

Bases: rest_framework.viewsets.ModelViewSet

API endpoint that allows configmaps to be edited or deleted

deploy (request, *args, **kwargs)
    Action to deploy the ConfigMap resource to target cluster.

permission_classes = [rest_framework.permissions.IsAuthenticated]

queryset
```

remove (*request*, *args, **kwargs)
Action to delete the kubernetes ConfigMap from the cluster.

serializer_class
alias of *kubernetes_manager.serializers.base.KubernetesConfigMapSerializer*

class *kubernetes_manager.views.model_views.KubernetesContainerViewSet* (*args:
Any,
**kwargs:
Any)

Bases: *rest_framework.viewsets.ModelViewSet*

API endpoint that allows containers to be edited or deleted.

permission_classes = [*rest_framework.permissions.IsAuthenticated*]

queryset

serializer_class
alias of *kubernetes_manager.serializers.base.KubernetesContainerSerializer*

class *kubernetes_manager.views.model_views.KubernetesDeploymentViewSet* (*args:
Any,
**kwargs:
Any)

Bases: *rest_framework.viewsets.ModelViewSet*

API endpoint that allows deployments to be edited or deleted.

deploy (*request*, *args, **kwargs)
Action to deploy the kubernetes resource to target cluster.

permission_classes = [*rest_framework.permissions.IsAuthenticated*]

pod_usage (*request*, *args, **kwargs)
Action to fetch point-in-time cpu and memory usage of pod.

queryset

remove (*request*, *args, **kwargs)
Action to delete the kubernetes resource from the cluster/namespaces

serializer_class
alias of *kubernetes_manager.serializers.base.KubernetesDeploymentSerializer*

class *kubernetes_manager.views.model_views.KubernetesIngressViewSet* (*args:
Any,
**kwargs:
Any)

Bases: *rest_framework.viewsets.ModelViewSet*

API endpoint that allows ingress to be edited or deleted.

deploy (*request*, *args, **kwargs)
Action to deploy the kubernetes resource to target cluster.

permission_classes = [*rest_framework.permissions.IsAuthenticated*]

queryset

remove (*request*, *args, **kwargs)
Action to delete the kubernetes resource from the cluster/namespace.

serializer_class
alias of *kubernetes_manager.serializers.base.KubernetesIngressSerializer*

```
class kubernetes_manager.views.model_views.KubernetesJobViewSet (*args: Any,
                                                                **kwargs:
                                                                Any)

Bases: rest_framework.viewsets.ModelViewSet

API endpoint that allows jobs to be edited or deleted.

deploy (request, *args, **kwargs)
    Action to deploy the kubernetes resource to target cluster.

permission_classes = [rest_framework.permissions.IsAuthenticated]

pod_usage (request, *args, **kwargs)
    Action to fetch point-in-time cpu and memory usage of pod.

queryset

remove (request, *args, **kwargs)
    Action to delete the kubernetes resource from the target cluster/ns.

serializer_class
    alias of kubernetes_manager.serializers.base.KubernetesJobSerializer

class kubernetes_manager.views.model_views.KubernetesNamespaceViewSet (*args:
                                                                Any,
                                                                **kwargs:
                                                                Any)

Bases: rest_framework.viewsets.ModelViewSet

API endpoint that allows namespaces to be created or deleted

deploy (request, *args, **kwargs)
    Action to deploy the namespace resource to target cluster.

permission_classes = [rest_framework.permissions.IsAuthenticated]

queryset

remove (request, *args, **kwargs)
    Action to delete the kubernetes namespace from the cluster.

serializer_class
    alias of kubernetes_manager.serializers.base.KubernetesNamespaceSerializer

class kubernetes_manager.views.model_views.KubernetesPodTemplateViewSet (*args:
                                                                Any,
                                                                **kwargs:
                                                                Any)

Bases: rest_framework.viewsets.ModelViewSet

API endpoint that allows pod templates to be edited or deleted.

permission_classes = [rest_framework.permissions.IsAuthenticated]

queryset

serializer_class
    alias of kubernetes_manager.serializers.base.KubernetesPodTemplateSerializer

class kubernetes_manager.views.model_views.KubernetesServiceViewSet (*args:
                                                                Any,
                                                                **kwargs:
                                                                Any)

Bases: rest_framework.viewsets.ModelViewSet
```

API endpoint that allows services to be edited or deleted.

deploy (*request*, *args, **kwargs)

Action to deploy the kubernetes resource to target cluster.

permission_classes = [rest_framework.permissions.IsAuthenticated]

queryset

remove (*request*, *args, **kwargs)

Action to delete the kubernetes resource from the cluster/namespace.

serializer_class

alias of *kubernetes_manager.serializers.base.KubernetesServiceSerializer*

```
class kubernetes_manager.views.model_views.KubernetesVolumeMountViewSet (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
```

Bases: rest_framework.viewsets.ModelViewSet

API endpoint that allows volumes to be edited or deleted.

permission_classes = [rest_framework.permissions.IsAuthenticated]

queryset

serializer_class

alias of *kubernetes_manager.serializers.base.KubernetesVolumeMountSerializer*

```
class kubernetes_manager.views.model_views.KubernetesVolumeViewSet (*args:
                                                                    Any,
                                                                    **kwargs:
                                                                    Any)
```

Bases: rest_framework.viewsets.ModelViewSet

API endpoint that allows volumes to be edited or deleted.

permission_classes = [rest_framework.permissions.IsAuthenticated]

queryset

serializer_class

alias of *kubernetes_manager.serializers.base.KubernetesVolumeSerializer*

```
class kubernetes_manager.views.model_views.TargetClusterViewSet (*args: Any,
                                                                    **kwargs:
                                                                    Any)
```

Bases: rest_framework.viewsets.ModelViewSet

API endpoint that allows cluster configs to be edited or deleted

permission_classes = [rest_framework.permissions.IsAuthenticated]

queryset

serializer_class

alias of *kubernetes_manager.serializers.base.TargetClusterSerializer*

2.5 Utils

2.5.1 Kubernetes Utils

`kubernetes_manager.utils.coalesce_dicts` (*target=<class 'dict'>, source=<class 'dict'>*)

`kubernetes_manager.utils.find_namespaced_pods` (*namespace, job_name, api_client*)
find pod by namespace and job name

Args: namespace (str) - job_name (str) - api_client (CoreV1Api) -

Returns: str - Name of the pod if found

`kubernetes_manager.utils.generate_kubeconfig` (*context, cluster, user, default_name='k8s-job-runner'*)

Format helper for generating individual cluster kubeconfigs

Args: context (dict) - cluster (dict) - user (dict) -

Returns: dict -

`kubernetes_manager.utils.get_command_output` (*cmd*)
retrieve command output for a given command provided

`kubernetes_manager.utils.get_dict_hash` (*data*)

`kubernetes_manager.utils.run_command` (*cmd, log_method=<bound method Logger.info of <Logger kubernetes_manager.utils (WARNING)>>*)

Subprocess wrapper for capturing output of processes to logs

`kubernetes_manager.utils.split_kubeconfig` (*kubeconfig*)

Helper method to split a kubeconfig into separate, per-cluster configurations

Args: kubeconfig (dict or str) -

Returns: list(dict)

2.6 API Spec

2.6.1 clusters

GET `/clusters/`

API endpoint that allows cluster configs to be edited or deleted

Status Codes

- 200 OK –

Response JSON Object

- `[] .api_endpoint` (*string*) – Cluster Endpoint URL (required)
- `[] .telemetry_endpoint` (*string*) – Telemetry Endpoint URL (required)
- `[] .title` (*string*) – (required)

POST `/clusters/`

API endpoint that allows cluster configs to be edited or deleted

Request JSON Object

- `api_endpoint` (*string*) – Cluster Endpoint URL (required)

- **telemetry_endpoint** (*string*) – Telemetry Endpoint URL (required)
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **api_endpoint** (*string*) – Cluster Endpoint URL (required)
- **telemetry_endpoint** (*string*) – Telemetry Endpoint URL (required)
- **title** (*string*) – (required)

GET /clusters/{id}/

API endpoint that allows cluster configs to be edited or deleted

Parameters

- **id** (*integer*) – A unique integer value identifying this target cluster.

Status Codes

- 200 OK –

Response JSON Object

- **api_endpoint** (*string*) – Cluster Endpoint URL (required)
- **telemetry_endpoint** (*string*) – Telemetry Endpoint URL (required)
- **title** (*string*) – (required)

PUT /clusters/{id}/

API endpoint that allows cluster configs to be edited or deleted

Parameters

- **id** (*integer*) – A unique integer value identifying this target cluster.

Request JSON Object

- **api_endpoint** (*string*) – Cluster Endpoint URL (required)
- **telemetry_endpoint** (*string*) – Telemetry Endpoint URL (required)
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_endpoint** (*string*) – Cluster Endpoint URL (required)
- **telemetry_endpoint** (*string*) – Telemetry Endpoint URL (required)
- **title** (*string*) – (required)

PATCH /clusters/{id}/

API endpoint that allows cluster configs to be edited or deleted

Parameters

- **id** (*integer*) – A unique integer value identifying this target cluster.

Request JSON Object

- **api_endpoint** (*string*) – Cluster Endpoint URL (required)
- **telemetry_endpoint** (*string*) – Telemetry Endpoint URL (required)
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_endpoint** (*string*) – Cluster Endpoint URL (required)
- **telemetry_endpoint** (*string*) – Telemetry Endpoint URL (required)
- **title** (*string*) – (required)

DELETE /clusters/{id}/

API endpoint that allows cluster configs to be edited or deleted

Parameters

- **id** (*integer*) – A unique integer value identifying this target cluster.

Status Codes

- 204 No Content –

2.6.2 configmaps

GET /configmaps/

API endpoint that allows configmaps to be edited or deleted

Status Codes

- 200 OK –

Response JSON Object

- **[].cluster** (*string*) – ForeignKey to TargetCluster object.
- **[].description** (*string*) –
- **[].kind** (*string*) –
- **[].title** (*string*) – (required)

POST /configmaps/

API endpoint that allows configmaps to be edited or deleted

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.

- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

GET /configmaps/{id}/

API endpoint that allows configmaps to be edited or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

PUT /configmaps/{id}/

API endpoint that allows configmaps to be edited or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

PATCH /configmaps/{id}/

API endpoint that allows configmaps to be edited or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –

- **kind** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

DELETE /configmaps/{id}/

API endpoint that allows configmaps to be edited or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

GET /configmaps/{id}/deploy/

Action to deploy the ConfigMap resource to target cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

GET /configmaps/{id}/remove/

Action to delete the kubernetes ConfigMap from the cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

2.6.3 containers

GET /containers/

API endpoint that allows containers to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- `[].args` (*string*) – Comma separated args to run with command when instantiating container.
- `[].cluster` (*string*) – ForeignKey to TargetCluster object.
- `[].command` (*string*) – Command to run when start container
- `[].description` (*string*) –
- `[].image_name` (*string*) – Properly qualified image name.
- `[].image_pull_policy` (*string*) –
- `[].image_tag` (*string*) – Tag name for the image to be used for this job
- `[].port` (*integer*) –
- `[].title` (*string*) – (required)
- `[].volume_mount` (*string*) –

POST /containers/

API endpoint that allows containers to be edited or deleted.

Request JSON Object

- `args` (*string*) – Comma separated args to run with command when instantiating container.
- `cluster` (*string*) – ForeignKey to TargetCluster object.
- `command` (*string*) – Command to run when start container
- `description` (*string*) –
- `image_name` (*string*) – Properly qualified image name.
- `image_pull_policy` (*string*) –
- `image_tag` (*string*) – Tag name for the image to be used for this job
- `port` (*integer*) –
- `title` (*string*) – (required)
- `volume_mount` (*string*) –

Status Codes

- 201 Created –

Response JSON Object

- `args` (*string*) – Comma separated args to run with command when instantiating container.
- `cluster` (*string*) – ForeignKey to TargetCluster object.

- **command** (*string*) – Command to run when start container
- **description** (*string*) –
- **image_name** (*string*) – Properly qualified image name.
- **image_pull_policy** (*string*) –
- **image_tag** (*string*) – Tag name for the image to be used for this job
- **port** (*integer*) –
- **title** (*string*) – (required)
- **volume_mount** (*string*) –

GET /containers/{id}/

API endpoint that allows containers to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **args** (*string*) – Comma separated args to run with command when instantiating container.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **command** (*string*) – Command to run when start container
- **description** (*string*) –
- **image_name** (*string*) – Properly qualified image name.
- **image_pull_policy** (*string*) –
- **image_tag** (*string*) – Tag name for the image to be used for this job
- **port** (*integer*) –
- **title** (*string*) – (required)
- **volume_mount** (*string*) –

PUT /containers/{id}/

API endpoint that allows containers to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **args** (*string*) – Comma separated args to run with command when instantiating container.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **command** (*string*) – Command to run when start container
- **description** (*string*) –
- **image_name** (*string*) – Properly qualified image name.

- **image_pull_policy** (*string*) –
- **image_tag** (*string*) – Tag name for the image to be used for this job
- **port** (*integer*) –
- **title** (*string*) – (required)
- **volume_mount** (*string*) –

Status Codes

- 200 OK –

Response JSON Object

- **args** (*string*) – Comma separated args to run with command when instantiating container.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **command** (*string*) – Command to run when start container
- **description** (*string*) –
- **image_name** (*string*) – Properly qualified image name.
- **image_pull_policy** (*string*) –
- **image_tag** (*string*) – Tag name for the image to be used for this job
- **port** (*integer*) –
- **title** (*string*) – (required)
- **volume_mount** (*string*) –

PATCH /containers/{id}/

API endpoint that allows containers to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **args** (*string*) – Comma separated args to run with command when instantiating container.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **command** (*string*) – Command to run when start container
- **description** (*string*) –
- **image_name** (*string*) – Properly qualified image name.
- **image_pull_policy** (*string*) –
- **image_tag** (*string*) – Tag name for the image to be used for this job
- **port** (*integer*) –
- **title** (*string*) – (required)
- **volume_mount** (*string*) –

Status Codes

- 200 OK –

Response JSON Object

- **args** (*string*) – Comma separated args to run with command when instantiating container.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **command** (*string*) – Command to run when start container
- **description** (*string*) –
- **image_name** (*string*) – Properly qualified image name.
- **image_pull_policy** (*string*) –
- **image_tag** (*string*) – Tag name for the image to be used for this job
- **port** (*integer*) –
- **title** (*string*) – (required)
- **volume_mount** (*string*) –

DELETE /containers/{id}/

API endpoint that allows containers to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

2.6.4 deployments

GET /deployments/

API endpoint that allows deployments to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- [] **.api_version** (*string*) – API version used to deploy child object.
- [] **.cluster** (*string*) – ForeignKey to TargetCluster object.
- [] **.description** (*string*) –
- [] **.kind** (*string*) – String representation of Kubernetes object kind (required)
- [] **.kuid** (*string*) – Object's UID in the cluster
- [] **.namespace** (*string*) – Live namespace the object is associated with. (required)
- [] **.pod_template** (*string*) – (required)
- [] **.port** (*integer*) – Port object will expose
- [] **.replicas** (*integer*) –
- [] **.title** (*string*) – (required)

POST /deployments/

API endpoint that allows deployments to be edited or deleted.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

GET /deployments/{id}/

API endpoint that allows deployments to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster

- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

PUT /deployments/{id}/

API endpoint that allows deployments to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

PATCH /deployments/{id}/

API endpoint that allows deployments to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

DELETE /deployments/{id}/

API endpoint that allows deployments to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

GET /deployments/{id}/deploy/

Action to deploy the kubernetes resource to target cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

GET /deployments/{id}/pod_usage/

Action to fetch point-in-time cpu and memory usage of pod.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

GET /deployments/{id}/remove/

Action to delete the kubernetes resource from the cluster/namespaces

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –

- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **replicas** (*integer*) –
- **title** (*string*) – (required)

2.6.5 ingresses

GET /ingresses/

API endpoint that allows ingress to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- [] **.api_version** (*string*) – API version used to deploy child object.
- [] **.cluster** (*string*) – ForeignKey to TargetCluster object.
- [] **.description** (*string*) –
- [] **.hostname** (*string*) –
- [] **.kind** (*string*) – String representation of Kubernetes object kind (required)
- [] **.kuid** (*string*) – Object’s UID in the cluster
- [] **.namespace** (*string*) – Live namespace the object is associated with. (required)
- [] **.path** (*string*) –
- [] **.port** (*integer*) – Port object will expose
- [] **.target_service** (*string*) – (required)
- [] **.title** (*string*) – (required)

POST /ingresses/

API endpoint that allows ingress to be edited or deleted.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose

- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

GET /ingresses/{id}/

API endpoint that allows ingress to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

PUT /ingresses/{id}/

API endpoint that allows ingress to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

PATCH /ingresses/{id}/

API endpoint that allows ingress to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –

- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

DELETE /ingresses/{id}/

API endpoint that allows ingress to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

GET /ingresses/{id}/deploy/

Action to deploy the kubernetes resource to target cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –

- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

GET /ingresses/{id}/remove/

Action to delete the kubernetes resource from the cluster/namespace.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **hostname** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **path** (*string*) –
- **port** (*integer*) – Port object will expose
- **target_service** (*string*) – (required)
- **title** (*string*) – (required)

2.6.6 jobs

GET /jobs/

API endpoint that allows jobs to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- **[].api_version** (*string*) – API version used to deploy child object.
- **[].backoff_limit** (*integer*) –
- **[].cluster** (*string*) – ForeignKey to TargetCluster object.
- **[].description** (*string*) –

- `[].kind` (*string*) – String representation of Kubernetes object kind (required)
- `[].kuid` (*string*) – Object’s UID in the cluster
- `[].namespace` (*string*) – Live namespace the object is associated with. (required)
- `[].pod_template` (*string*) – (required)
- `[].port` (*integer*) – Port object will expose
- `[].title` (*string*) – (required)

POST /jobs/

API endpoint that allows jobs to be edited or deleted.

Request JSON Object

- `api_version` (*string*) – API version used to deploy child object.
- `backoff_limit` (*integer*) –
- `cluster` (*string*) – ForeignKey to TargetCluster object.
- `description` (*string*) –
- `kind` (*string*) – String representation of Kubernetes object kind (required)
- `kuid` (*string*) – Object’s UID in the cluster
- `namespace` (*string*) – Live namespace the object is associated with. (required)
- `pod_template` (*string*) – (required)
- `port` (*integer*) – Port object will expose
- `title` (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- `api_version` (*string*) – API version used to deploy child object.
- `backoff_limit` (*integer*) –
- `cluster` (*string*) – ForeignKey to TargetCluster object.
- `description` (*string*) –
- `kind` (*string*) – String representation of Kubernetes object kind (required)
- `kuid` (*string*) – Object’s UID in the cluster
- `namespace` (*string*) – Live namespace the object is associated with. (required)
- `pod_template` (*string*) – (required)
- `port` (*integer*) – Port object will expose
- `title` (*string*) – (required)

GET /jobs/{id}/

API endpoint that allows jobs to be edited or deleted.

Parameters

- `id` (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

PUT /jobs/{id}/

API endpoint that allows jobs to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster

- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

PATCH /jobs/{id}/

API endpoint that allows jobs to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object's UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object's UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

DELETE /jobs/{id}/

API endpoint that allows jobs to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

GET /jobs/{id}/deploy/

Action to deploy the kubernetes resource to target cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object's UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

GET /jobs/{id}/pod_usage/

Action to fetch point-in-time cpu and memory usage of pod.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object's UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

GET /jobs/{id}/remove/

Action to delete the kubernetes resource from the target cluster/ns.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **backoff_limit** (*integer*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **pod_template** (*string*) – (required)
- **port** (*integer*) – Port object will expose
- **title** (*string*) – (required)

2.6.7 mounts

GET /mounts/

API endpoint that allows volumes to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- **[].cluster** (*string*) – ForeignKey to TargetCluster object.
- **[].description** (*string*) –
- **[].mount_path** (*string*) –
- **[].sub_path** (*string*) –
- **[].title** (*string*) – (required)

POST /mounts/

API endpoint that allows volumes to be edited or deleted.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **mount_path** (*string*) –
- **sub_path** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **mount_path** (*string*) –
- **sub_path** (*string*) –
- **title** (*string*) – (required)

GET /mounts/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **mount_path** (*string*) –
- **sub_path** (*string*) –
- **title** (*string*) – (required)

PUT /mounts/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **mount_path** (*string*) –
- **sub_path** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **mount_path** (*string*) –
- **sub_path** (*string*) –
- **title** (*string*) – (required)

PATCH /mounts/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **mount_path** (*string*) –
- **sub_path** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **mount_path** (*string*) –
- **sub_path** (*string*) –
- **title** (*string*) – (required)

DELETE /mounts/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

2.6.8 namespaces

GET /namespaces/

API endpoint that allows namespaces to be created or deleted

Status Codes

- 200 OK –

Response JSON Object

- **[].api_version** (*string*) –
- **[].cluster** (*string*) – ForeignKey to TargetCluster object.
- **[].description** (*string*) –
- **[].exists** (*boolean*) –
- **[].kind** (*string*) –
- **[].title** (*string*) – (required)

POST /namespaces/

API endpoint that allows namespaces to be created or deleted

Request JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

GET /namespaces/{id}/

API endpoint that allows namespaces to be created or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

PUT /namespaces/{id}/

API endpoint that allows namespaces to be created or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) –

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

PATCH /namespaces/{id}/

API endpoint that allows namespaces to be created or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

DELETE /namespaces/{id}/

API endpoint that allows namespaces to be created or deleted

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

GET /namespaces/{id}/deploy/

Action to deploy the namespace resource to target cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

GET /namespaces/{id}/remove/

Action to delete the kubernetes namespace from the cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) –
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **exists** (*boolean*) –
- **kind** (*string*) –
- **title** (*string*) – (required)

2.6.9 pods

GET /pods/

API endpoint that allows pod templates to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- **[] .cluster** (*string*) – ForeignKey to TargetCluster object.

- `[].description` (*string*) –
- `[].primary_container` (*string*) – (required)
- `[].restart_policy` (*string*) –
- `[].secondary_container` (*string*) –
- `[].title` (*string*) – (required)
- `[].volume` (*string*) –

POST /pods/

API endpoint that allows pod templates to be edited or deleted.

Request JSON Object

- `cluster` (*string*) – ForeignKey to TargetCluster object.
- `description` (*string*) –
- `primary_container` (*string*) – (required)
- `restart_policy` (*string*) –
- `secondary_container` (*string*) –
- `title` (*string*) – (required)
- `volume` (*string*) –

Status Codes

- 201 Created –

Response JSON Object

- `cluster` (*string*) – ForeignKey to TargetCluster object.
- `description` (*string*) –
- `primary_container` (*string*) – (required)
- `restart_policy` (*string*) –
- `secondary_container` (*string*) –
- `title` (*string*) – (required)
- `volume` (*string*) –

GET /pods/{id}/

API endpoint that allows pod templates to be edited or deleted.

Parameters

- `id` (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- `cluster` (*string*) – ForeignKey to TargetCluster object.
- `description` (*string*) –
- `primary_container` (*string*) – (required)
- `restart_policy` (*string*) –

- **secondary_container** (*string*) –
- **title** (*string*) – (required)
- **volume** (*string*) –

PUT /pods/{id}/

API endpoint that allows pod templates to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **primary_container** (*string*) – (required)
- **restart_policy** (*string*) –
- **secondary_container** (*string*) –
- **title** (*string*) – (required)
- **volume** (*string*) –

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **primary_container** (*string*) – (required)
- **restart_policy** (*string*) –
- **secondary_container** (*string*) –
- **title** (*string*) – (required)
- **volume** (*string*) –

PATCH /pods/{id}/

API endpoint that allows pod templates to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **primary_container** (*string*) – (required)
- **restart_policy** (*string*) –
- **secondary_container** (*string*) –
- **title** (*string*) – (required)
- **volume** (*string*) –

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **primary_container** (*string*) – (required)
- **restart_policy** (*string*) –
- **secondary_container** (*string*) –
- **title** (*string*) – (required)
- **volume** (*string*) –

DELETE /pods/{id}/

API endpoint that allows pod templates to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

2.6.10 services

GET /services/

API endpoint that allows services to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- [] .**api_version** (*string*) – API version used to deploy child object.
- [] .**cluster** (*string*) – ForeignKey to TargetCluster object.
- [] .**description** (*string*) –
- [] .**kind** (*string*) – String representation of Kubernetes object kind (required)
- [] .**kuid** (*string*) – Object's UID in the cluster
- [] .**namespace** (*string*) – Live namespace the object is associated with. (required)
- [] .**port** (*integer*) – Port object will expose
- [] .**target_port** (*integer*) –
- [] .**title** (*string*) – (required)

POST /services/

API endpoint that allows services to be edited or deleted.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.

- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

GET /services/{id}/

API endpoint that allows services to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

PUT /services/{id}/

API endpoint that allows services to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

PATCH /services/{id}/

API endpoint that allows services to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose

- **target_port** (*integer*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

DELETE /services/{id}/

API endpoint that allows services to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

GET /services/{id}/deploy/

Action to deploy the kubernetes resource to target cluster.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object’s UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

GET /services/{id}/remove/

Action to delete the kubernetes resource from the cluster/namespace.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **api_version** (*string*) – API version used to deploy child object.
- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **kind** (*string*) – String representation of Kubernetes object kind (required)
- **kuid** (*string*) – Object's UID in the cluster
- **namespace** (*string*) – Live namespace the object is associated with. (required)
- **port** (*integer*) – Port object will expose
- **target_port** (*integer*) –
- **title** (*string*) – (required)

2.6.11 volumes

GET /volumes/

API endpoint that allows volumes to be edited or deleted.

Status Codes

- 200 OK –

Response JSON Object

- **[] .cluster** (*string*) – ForeignKey to TargetCluster object.
- **[] .description** (*string*) –
- **[] .title** (*string*) – (required)

POST /volumes/

API endpoint that allows volumes to be edited or deleted.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 201 Created –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –

- **title** (*string*) – (required)

GET /volumes/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **title** (*string*) – (required)

PUT /volumes/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **title** (*string*) – (required)

PATCH /volumes/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Request JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.
- **description** (*string*) –
- **title** (*string*) – (required)

Status Codes

- 200 OK –

Response JSON Object

- **cluster** (*string*) – ForeignKey to TargetCluster object.

- **description** (*string*) –
- **title** (*string*) – (required)

DELETE /volumes/{id}/

API endpoint that allows volumes to be edited or deleted.

Parameters

- **id** (*string*) – UUID Auto field.

Status Codes

- 204 No Content –

INDICES AND TABLES

- genindex
- modindex
- search

PYTHON MODULE INDEX

k

`kubernetes_manager.models.base`, 8
`kubernetes_manager.models.kube`, 12
`kubernetes_manager.models.mixins`, 28
`kubernetes_manager.models.target_cluster`,
30
`kubernetes_manager.serializers.base`, 33
`kubernetes_manager.utils`, 40
`kubernetes_manager.views.func_views`, 39
`kubernetes_manager.views.model_views`,
36

HTTP ROUTING TABLE

/clusters

GET /clusters/, 40
GET /clusters/{id}/, 41
POST /clusters/, 40
PUT /clusters/{id}/, 41
DELETE /clusters/{id}/, 42
PATCH /clusters/{id}/, 41

/configmaps

GET /configmaps/, 42
GET /configmaps/{id}/, 43
GET /configmaps/{id}/deploy/, 44
GET /configmaps/{id}/remove/, 44
POST /configmaps/, 42
PUT /configmaps/{id}/, 43
DELETE /configmaps/{id}/, 44
PATCH /configmaps/{id}/, 43

/containers

GET /containers/, 45
GET /containers/{id}/, 46
POST /containers/, 45
PUT /containers/{id}/, 46
DELETE /containers/{id}/, 48
PATCH /containers/{id}/, 47

/deployments

GET /deployments/, 48
GET /deployments/{id}/, 49
GET /deployments/{id}/deploy/, 51
GET /deployments/{id}/pod_usage/, 52
GET /deployments/{id}/remove/, 52
POST /deployments/, 48
PUT /deployments/{id}/, 50
DELETE /deployments/{id}/, 51
PATCH /deployments/{id}/, 50

/ingresses

GET /ingresses/, 53
GET /ingresses/{id}/, 54
GET /ingresses/{id}/deploy/, 56
GET /ingresses/{id}/remove/, 57

POST /ingresses/, 53
PUT /ingresses/{id}/, 54
DELETE /ingresses/{id}/, 56
PATCH /ingresses/{id}/, 55

/jobs

GET /jobs/, 57
GET /jobs/{id}/, 58
GET /jobs/{id}/deploy/, 61
GET /jobs/{id}/pod_usage/, 61
GET /jobs/{id}/remove/, 61
POST /jobs/, 58
PUT /jobs/{id}/, 59
DELETE /jobs/{id}/, 60
PATCH /jobs/{id}/, 60

/mounts

GET /mounts/, 62
GET /mounts/{id}/, 63
POST /mounts/, 62
PUT /mounts/{id}/, 63
DELETE /mounts/{id}/, 64
PATCH /mounts/{id}/, 63

/namespaces

GET /namespaces/, 64
GET /namespaces/{id}/, 65
GET /namespaces/{id}/deploy/, 67
GET /namespaces/{id}/remove/, 67
POST /namespaces/, 64
PUT /namespaces/{id}/, 65
DELETE /namespaces/{id}/, 66
PATCH /namespaces/{id}/, 66

/pods

GET /pods/, 67
GET /pods/{id}/, 68
POST /pods/, 68
PUT /pods/{id}/, 69
DELETE /pods/{id}/, 70
PATCH /pods/{id}/, 69

/services

GET /services/, 70
GET /services/{id}/, 71
GET /services/{id}/deploy/, 73
GET /services/{id}/remove/, 73
POST /services/, 70
PUT /services/{id}/, 71
DELETE /services/{id}/, 73
PATCH /services/{id}/, 72

/volumes

GET /volumes/, 74
GET /volumes/{id}/, 75
POST /volumes/, 74
PUT /volumes/{id}/, 75
DELETE /volumes/{id}/, 76
PATCH /volumes/{id}/, 75

INDEX

A

- abstract (`kubernetes_manager.models.base.KubernetesBase.Meta` attribute), 9
- abstract (`kubernetes_manager.models.base.KubernetesMetadataObjBase.Meta` attribute), 10
- abstract (`kubernetes_manager.models.base.KubernetesNetworkingBase.Meta` attribute), 11
- abstract (`kubernetes_manager.models.mixins.KubernetesTelemetryMixin.Meta` attribute), 29
- abstract (`kubernetes_manager.serializers.base.KubernetesBaseSerializer.Meta` attribute), 33
- abstract (`kubernetes_manager.serializers.base.KubernetesMetadataObjBaseSerializer.Meta` attribute), 34
- abstract (`kubernetes_manager.serializers.base.KubernetesNetworkingBaseSerializer.Meta` attribute), 35
- add () (`kubernetes_manager.models.target_cluster.TargetCluster` class method), 30
- annotations (`kubernetes_manager.models.base.KubernetesMetadataObjBase` attribute), 10
- api_endpoint (`kubernetes_manager.models.target_cluster.TargetCluster` attribute), 30
- api_version (`kubernetes_manager.models.base.KubernetesNetworkingBase` attribute), 11
- api_version (`kubernetes_manager.models.kube.KubernetesNamespace` attribute), 21
- args (`kubernetes_manager.models.kube.KubernetesContainer` attribute), 14
- average_cpu_usage (`kubernetes_manager.models.mixins.KubernetesTelemetryMixin` attribute), 29
- average_mem_usage (`kubernetes_manager.models.mixins.KubernetesTelemetryMixin` attribute), 29
- backoff_limit (`kubernetes_manager.models.kube.KubernetesJob` attribute), 19
- binary (`kubernetes_manager.models.kube.KubernetesConfigMap` attribute), 12
- cluster (`kubernetes_manager.models.base.KubernetesBase` attribute), 9
- cluster (`kubernetes_manager.models.base.KubernetesMetadataObjBase` attribute), 10
- cluster (`kubernetes_manager.models.kube.KubernetesContainer` attribute), 14
- cluster (`kubernetes_manager.models.kube.KubernetesDeployment` attribute), 16
- cluster (`kubernetes_manager.models.kube.KubernetesIngress` attribute), 18
- cluster (`kubernetes_manager.models.kube.KubernetesJob` attribute), 19
- cluster (`kubernetes_manager.models.kube.KubernetesNamespace` attribute), 21
- cluster (`kubernetes_manager.models.kube.KubernetesPodTemplate` attribute), 23
- cluster (`kubernetes_manager.models.kube.KubernetesService` attribute), 25
- cluster (`kubernetes_manager.models.kube.KubernetesVolume` attribute), 27
- cluster (`kubernetes_manager.models.kube.KubernetesVolumeMount` attribute), 28
- cluster_id (`kubernetes_manager.models.base.KubernetesBase` attribute), 9
- command (`kubernetes_manager.models.kube.KubernetesContainer` attribute), 14
- config (`kubernetes_manager.models.base.KubernetesBase` attribute), 9
- config (`kubernetes_manager.models.target_cluster.TargetCluster` attribute), 30
- containers (`kubernetes_manager.models.kube.KubernetesPodTemplate` attribute), 23

cpu_usage_seconds (kubernetes_manager.models.mixins.KubernetesTelemetryMixin attribute), 29

D

data (kubernetes_manager.models.kube.KubernetesConfigMap attribute), 12

deploy () (kubernetes_manager.models.kube.KubernetesConfigMap attribute), 13

deploy () (kubernetes_manager.models.kube.KubernetesDeployment attribute), 16

deploy () (kubernetes_manager.models.kube.KubernetesIngress attribute), 18

deploy () (kubernetes_manager.models.kube.KubernetesJob attribute), 20

deploy () (kubernetes_manager.models.kube.KubernetesNamespace attribute), 21

deploy () (kubernetes_manager.models.kube.KubernetesService attribute), 25

deploy () (kubernetes_manager.views.model_views.KubernetesConfigMapViewSet method), 36

deploy () (kubernetes_manager.views.model_views.KubernetesDeploymentViewSet method), 37

deploy () (kubernetes_manager.views.model_views.KubernetesIngressViewSet method), 37

deploy () (kubernetes_manager.views.model_views.KubernetesJobViewSet method), 38

deploy () (kubernetes_manager.views.model_views.KubernetesNamespaceViewSet method), 38

deploy () (kubernetes_manager.views.model_views.KubernetesServiceViewSet method), 39

deployed (kubernetes_manager.models.base.KubernetesBase attribute), 9

E

exists (kubernetes_manager.models.kube.KubernetesNamespace attribute), 21

F

fields (kubernetes_manager.serializers.base.KubernetesBaseSerializer.Meta attribute), 33

fields (kubernetes_manager.serializers.base.KubernetesConfigMapSerializer.Meta attribute), 33

fields (kubernetes_manager.serializers.base.KubernetesContainerSerializer.Meta attribute), 33

fields (kubernetes_manager.serializers.base.KubernetesDeploymentSerializer.Meta attribute), 34

fields (kubernetes_manager.serializers.base.KubernetesIngressSerializer.Meta attribute), 34

fields (kubernetes_manager.serializers.base.KubernetesJobSerializer.Meta attribute), 34

fields (kubernetes_manager.serializers.base.KubernetesMetadataObjectSerializer.Meta attribute), 34

fields (kubernetes_manager.serializers.base.KubernetesNamespaceSerializer.Meta attribute), 35

fields (kubernetes_manager.serializers.base.KubernetesNetworkingBaseSerializer.Meta attribute), 35

fields (kubernetes_manager.serializers.base.KubernetesPodTemplateSerializer.Meta attribute), 35

fields (kubernetes_manager.serializers.base.KubernetesServiceSerializer.Meta attribute), 35

fields (kubernetes_manager.serializers.base.KubernetesVolumeMountSerializer.Meta attribute), 36

fields (kubernetes_manager.serializers.base.KubernetesVolumeSerializer.Meta attribute), 36

fields (kubernetes_manager.serializers.base.TargetClusterSerializer.Meta attribute), 36

find_namespaced_pods () (in module kubernetes_manager.utils), 40

G

generate_kubeconfig () (in module kubernetes_manager.utils), 40

get_client () (kubernetes_manager.models.base.KubernetesBase method), 9

get_output () (in module kubernetes_manager.utils), 40

get_restart_policy_display () (kubernetes_manager.models.kube.KubernetesContainer method), 14

get_obj () (kubernetes_manager.models.kube.KubernetesConfigMap method), 13

get_obj () (kubernetes_manager.models.kube.KubernetesContainer method), 14

get_obj () (kubernetes_manager.models.kube.KubernetesDeployment method), 16

get_obj () (kubernetes_manager.models.kube.KubernetesIngress method), 18

get_obj () (kubernetes_manager.models.kube.KubernetesJob method), 20

get_obj () (kubernetes_manager.models.kube.KubernetesNamespace method), 21

get_obj () (kubernetes_manager.models.kube.KubernetesPodTemplate method), 24

get_obj () (kubernetes_manager.models.kube.KubernetesService method), 25

get_obj () (kubernetes_manager.models.kube.KubernetesVolume method), 27

get_obj () (kubernetes_manager.models.kube.KubernetesVolumeMount method), 28

get_restart_policy_display () (kubernetes_manager.models.kube.KubernetesContainer method), 24

<code>get_telemetry_source_display()</code> (<i>kubernetes_manager.models.target_cluster.TargetCluster</i> method), 30	<code>KubernetesConfigMap.MultipleObjectsReturned</code> , 12
H	<code>kubernetesconfigmap_set</code> (<i>kubernetes_manager.models.kube.KubernetesNamespace</i> attribute), 21
<code>hostname</code> (<i>kubernetes_manager.models.kube.KubernetesIngress</i> attribute), 18	<code>kubernetesconfigmap_set</code> (<i>kubernetes_manager.models.target_cluster.TargetCluster</i> attribute), 30
I	<code>KubernetesConfigMapSerializer</code> (class in <i>kubernetes_manager.serializers.base</i>), 33
<code>id</code> (<i>kubernetes_manager.models.base.KubernetesBase</i> attribute), 9	<code>KubernetesConfigMapSerializer.Meta</code> (class in <i>kubernetes_manager.serializers.base</i>), 33
<code>id</code> (<i>kubernetes_manager.models.target_cluster.TargetCluster</i> attribute), 30	<code>KubernetesConfigMapViewSet</code> (class in <i>kubernetes_manager.views.model_views</i>), 36
<code>image_name</code> (<i>kubernetes_manager.models.kube.KubernetesContainer</i> attribute), 14	<code>KubernetesContainer</code> (class in <i>kubernetes_manager.models.kube</i>), 13
<code>image_pull_policy</code> (<i>kubernetes_manager.models.kube.KubernetesContainer</i> attribute), 14	<code>KubernetesContainer.DoesNotExist</code> , 14
<code>image_tag</code> (<i>kubernetes_manager.models.kube.KubernetesContainer</i> attribute), 14	<code>KubernetesContainer.MultipleObjectsReturned</code> , 14
K	<code>kubernetescontainer_set</code> (<i>kubernetes_manager.models.kube.KubernetesVolumeMount</i> attribute), 28
<code>kind</code> (<i>kubernetes_manager.models.base.KubernetesNetworkingBase</i> attribute), 11	<code>kubernetescontainer_set</code> (<i>kubernetes_manager.models.target_cluster.TargetCluster</i> attribute), 31
<code>kind</code> (<i>kubernetes_manager.models.kube.KubernetesConfigMap</i> attribute), 13	<code>KubernetesContainerSerializer</code> (class in <i>kubernetes_manager.serializers.base</i>), 33
<code>kind</code> (<i>kubernetes_manager.models.kube.KubernetesNamespace</i> attribute), 21	<code>KubernetesContainerSerializer.Meta</code> (class in <i>kubernetes_manager.serializers.base</i>), 33
<code>kubernetes_manager.models.base</code> (module), 8	<code>KubernetesContainerViewSet</code> (class in <i>kubernetes_manager.views.model_views</i>), 37
<code>kubernetes_manager.models.kube</code> (module), 12	<code>KubernetesDeployment</code> (class in <i>kubernetes_manager.models.kube</i>), 15
<code>kubernetes_manager.models.mixins</code> (module), 28	<code>KubernetesDeployment.DoesNotExist</code> , 16
<code>kubernetes_manager.models.target_cluster</code> (module), 30	<code>KubernetesDeployment.MultipleObjectsReturned</code> , 16
<code>kubernetes_manager.serializers.base</code> (module), 33	<code>kubernetesdeployment_set</code> (<i>kubernetes_manager.models.kube.KubernetesNamespace</i> attribute), 22
<code>kubernetes_manager.utils</code> (module), 40	<code>kubernetesdeployment_set</code> (<i>kubernetes_manager.models.kube.KubernetesPodTemplate</i> attribute), 24
<code>kubernetes_manager.views.func_views</code> (module), 39	<code>kubernetesdeployment_set</code> (<i>kubernetes_manager.models.target_cluster.TargetCluster</i> attribute), 31
<code>kubernetes_manager.views.model_views</code> (module), 36	<code>KubernetesDeploymentSerializer</code> (class in <i>kubernetes_manager.serializers.base</i>), 33
<code>KubernetesBase</code> (class in <i>kubernetes_manager.models.base</i>), 8	<code>KubernetesDeploymentSerializer.Meta</code> (class in <i>kubernetes_manager.serializers.base</i>), 34
<code>KubernetesBase.Meta</code> (class in <i>kubernetes_manager.models.base</i>), 9	<code>KubernetesDeploymentViewSet</code> (class in <i>kubernetes_manager.views.model_views</i>), 37
<code>KubernetesBaseSerializer</code> (class in <i>kubernetes_manager.serializers.base</i>), 33	<code>KubernetesIngress</code> (class in <i>kubernetes_manager.models.kube</i>), 17
<code>KubernetesBaseSerializer.Meta</code> (class in <i>kubernetes_manager.serializers.base</i>), 33	
<code>KubernetesConfigMap</code> (class in <i>kubernetes_manager.models.kube</i>), 12	
<code>KubernetesConfigMap.DoesNotExist</code> , 12	

KubernetesIngress.DoesNotExist, 17
 KubernetesIngress.MultipleObjectsReturned, 18
 kubernetesingress_set (kubernetes_manager.models.kube.KubernetesNamespace attribute), 22
 kubernetesingress_set (kubernetes_manager.models.kube.KubernetesService attribute), 25
 kubernetesingress_set (kubernetes_manager.models.target_cluster.TargetCluster attribute), 31
 KubernetesIngressSerializer (class in kubernetes_manager.serializers.base), 34
 KubernetesIngressSerializer.Meta (class in kubernetes_manager.serializers.base), 34
 KubernetesIngressViewSet (class in kubernetes_manager.views.model_views), 37
 KubernetesJob (class in kubernetes_manager.models.kube), 18
 KubernetesJob.DoesNotExist, 19
 KubernetesJob.MultipleObjectsReturned, 19
 kubernetesjob_set (kubernetes_manager.models.kube.KubernetesNamespace attribute), 22
 kubernetesjob_set (kubernetes_manager.models.kube.KubernetesPodTemplate attribute), 24
 kubernetesjob_set (kubernetes_manager.models.target_cluster.TargetCluster attribute), 31
 KubernetesJobSerializer (class in kubernetes_manager.serializers.base), 34
 KubernetesJobSerializer.Meta (class in kubernetes_manager.serializers.base), 34
 KubernetesJobViewSet (class in kubernetes_manager.views.model_views), 37
 KubernetesMetadataObjBase (class in kubernetes_manager.models.base), 9
 KubernetesMetadataObjBase.Meta (class in kubernetes_manager.models.base), 10
 KubernetesMetadataObjBaseSerializer (class in kubernetes_manager.serializers.base), 34
 KubernetesMetadataObjBaseSerializer.Meta (class in kubernetes_manager.serializers.base), 34
 KubernetesNamespace (class in kubernetes_manager.models.kube), 20
 KubernetesNamespace.DoesNotExist, 21
 KubernetesNamespace.MultipleObjectsReturned, 21
 kubernetesnamespace_set (kubernetes_manager.models.kube.KubernetesNamespace attribute), 31
 KubernetesNamespaceSerializer (class in kubernetes_manager.serializers.base), 34
 KubernetesNamespaceSerializer.Meta (class in kubernetes_manager.serializers.base), 35
 KubernetesNamespaceViewSet (class in kubernetes_manager.views.model_views), 38
 KubernetesNetworkingBase (class in kubernetes_manager.models.base), 10
 KubernetesNetworkingBase.Meta (class in kubernetes_manager.models.base), 11
 KubernetesNetworkingBaseSerializer (class in kubernetes_manager.serializers.base), 35
 KubernetesNetworkingBaseSerializer.Meta (class in kubernetes_manager.serializers.base), 35
 KubernetesPodTemplate (class in kubernetes_manager.models.kube), 23
 KubernetesPodTemplate.DoesNotExist, 23
 KubernetesPodTemplate.MultipleObjectsReturned, 23
 kubernetespodtemplate_set (kubernetes_manager.models.kube.KubernetesContainer attribute), 14
 kubernetespodtemplate_set (kubernetes_manager.models.kube.KubernetesVolume attribute), 27
 kubernetespodtemplate_set (kubernetes_manager.models.target_cluster.TargetCluster attribute), 32
 KubernetesPodTemplateSerializer (class in kubernetes_manager.serializers.base), 35
 KubernetesPodTemplateSerializer.Meta (class in kubernetes_manager.serializers.base), 35
 KubernetesPodTemplateViewSet (class in kubernetes_manager.views.model_views), 38
 KubernetesService (class in kubernetes_manager.models.kube), 24
 KubernetesService.DoesNotExist, 25
 KubernetesService.MultipleObjectsReturned, 25
 kuberntesservice_set (kubernetes_manager.models.kube.KubernetesNamespace attribute), 22
 kuberntesservice_set (kubernetes_manager.models.target_cluster.TargetCluster attribute), 32
 KubernetesServiceSerializer (class in kubernetes_manager.serializers.base), 35
 KubernetesServiceSerializer.Meta (class in kubernetes_manager.serializers.base), 35
 KubernetesServiceViewSet (class in kuber-

netes_manager.views.model_views), 38
 KubernetesTelemetryMixin (class in *kubernetes_manager.models.mixins*), 28
 KubernetesTelemetryMixin.Meta (class in *kubernetes_manager.models.mixins*), 29
 KubernetesVolume (class in *kubernetes_manager.models.kube*), 26
 KubernetesVolume.DoesNotExist, 27
 KubernetesVolume.MultipleObjectsReturned, 27
 kubernetesvolume_set (kubernetes_manager.models.target_cluster.TargetCluster attribute), 32
 KubernetesVolumeMount (class in *kubernetes_manager.models.kube*), 27
 KubernetesVolumeMount.DoesNotExist, 28
 KubernetesVolumeMount.MultipleObjectsReturned, 28
 kubernetesvolumemount_set (kubernetes_manager.models.target_cluster.TargetCluster attribute), 32
 KubernetesVolumeMountSerializer (class in *kubernetes_manager.serializers.base*), 35
 KubernetesVolumeMountSerializer.Meta (class in *kubernetes_manager.serializers.base*), 36
 KubernetesVolumeMountViewSet (class in *kubernetes_manager.views.model_views*), 39
 KubernetesVolumeSerializer (class in *kubernetes_manager.serializers.base*), 36
 KubernetesVolumeSerializer.Meta (class in *kubernetes_manager.serializers.base*), 36
 KubernetesVolumeViewSet (class in *kubernetes_manager.views.model_views*), 39
 kuid (*kubernetes_manager.models.base.KubernetesNetworkingBase* attribute), 11
L
 labels (*kubernetes_manager.models.base.KubernetesMetadataObjBase* attribute), 10
M
 mem_usage_seconds (kubernetes_manager.models.mixins.KubernetesTelemetryMixin attribute), 29
 model (*kubernetes_manager.serializers.base.KubernetesBaseSerializer.Meta* attribute), 33
 model (*kubernetes_manager.serializers.base.KubernetesConfigMapSerializer.Meta* attribute), 33
 model (*kubernetes_manager.serializers.base.KubernetesContainerSerializer.Meta* attribute), 33
 model (*kubernetes_manager.serializers.base.KubernetesDeploymentSerializer.Meta* attribute), 34
 model (*kubernetes_manager.serializers.base.KubernetesIngressSerializer.Meta* attribute), 34
 model (*kubernetes_manager.serializers.base.KubernetesJobSerializer.Meta* attribute), 34
 model (*kubernetes_manager.serializers.base.KubernetesMetadataObjBase* attribute), 34
 model (*kubernetes_manager.serializers.base.KubernetesNamespaceSerializer.Meta* attribute), 35
 model (*kubernetes_manager.serializers.base.KubernetesNetworkingBase* attribute), 35
 model (*kubernetes_manager.serializers.base.KubernetesPodTemplateSerializer.Meta* attribute), 35
 model (*kubernetes_manager.serializers.base.KubernetesServiceSerializer.Meta* attribute), 35
 model (*kubernetes_manager.serializers.base.KubernetesVolumeMountSerializer.Meta* attribute), 36
 model (*kubernetes_manager.serializers.base.KubernetesVolumeSerializer.Meta* attribute), 36
 model (*kubernetes_manager.serializers.base.TargetClusterSerializer.Meta* attribute), 36
 mount_path (*kubernetes_manager.models.kube.KubernetesVolumeMount* attribute), 28
N
 namespace (*kubernetes_manager.models.base.KubernetesNetworkingBase* attribute), 11
 namespace (*kubernetes_manager.models.kube.KubernetesConfigMap* attribute), 13
 namespace (*kubernetes_manager.models.kube.KubernetesDeployment* attribute), 16
 namespace (*kubernetes_manager.models.kube.KubernetesIngress* attribute), 18
 namespace (*kubernetes_manager.models.kube.KubernetesJob* attribute), 20
 namespace (*kubernetes_manager.models.kube.KubernetesService* attribute), 26
 namespace_id (kubernetes_manager.models.base.KubernetesNetworkingBase attribute), 11
 namespace_id (kubernetes_manager.models.kube.KubernetesConfigMap attribute), 13
O
 object_status (kubernetes_manager.models.mixins.KubernetesTelemetryMixin attribute), 29
 object_status (kubernetes_manager.models.kube.KubernetesConfigMap attribute), 13
 object_status (kubernetes_manager.models.kube.KubernetesContainer attribute), 15
 object_status (kubernetes_manager.models.kube.KubernetesDeployment attribute), 16

objects (*kubernetes_manager.models.kube.KubernetesIngress* permission_classes (kuber-
attribute), 18 netes_manager.views.model_views.KubernetesVolumeViewSet

objects (*kubernetes_manager.models.kube.KubernetesJob* attribute), 39
attribute), 20 permission_classes (kuber-

objects (*kubernetes_manager.models.kube.KubernetesNamespace* netes_manager.views.model_views.TargetClusterViewSet
attribute), 22 attribute), 39

objects (*kubernetes_manager.models.kube.KubernetesPodTemplate* pod_template (kuber-
attribute), 24 netes_manager.models.kube.KubernetesDeployment

objects (*kubernetes_manager.models.kube.KubernetesService* attribute), 16
attribute), 26 pod_template (kuber-

objects (*kubernetes_manager.models.kube.KubernetesVolume* netes_manager.models.kube.KubernetesJob
attribute), 27 attribute), 20

objects (*kubernetes_manager.models.kube.KubernetesVolumeMount* pod_template_id (kuber-
attribute), 28 netes_manager.models.kube.KubernetesDeployment

objects (*kubernetes_manager.models.target_cluster.TargetCluster* attribute), 17
attribute), 32 pod_template_id (kuber-

override_name (kuber- netes_manager.models.kube.KubernetesJob
netes_manager.models.kube.KubernetesConfigMap attribute), 20
attribute), 13 pod_usage () (kuber-

P
netes_manager.views.model_views.KubernetesDeploymentViewSet
method), 37

parseSize () (kuber- pod_usage () (kuber-
netes_manager.models.mixins.KubernetesTelemetryMixin netes_manager.views.model_views.KubernetesJobViewSet
method), 29 method), 38

path (*kubernetes_manager.models.kube.KubernetesIngress* port (kubernetes_manager.models.base.KubernetesNetworkingBase
attribute), 18 attribute), 11

permission_classes (kuber- port (kubernetes_manager.models.kube.KubernetesContainer
netes_manager.views.model_views.KubernetesConfigMapViewSet attribute), 15
attribute), 36

permission_classes (kuber- **Q**
netes_manager.views.model_views.KubernetesContainerViewSet kubernetes_manager.views.model_views.KubernetesConfigMap
attribute), 37 attribute), 36

permission_classes (kuber- queryset (kubernetes_manager.views.model_views.KubernetesContainer
netes_manager.views.model_views.KubernetesDeploymentViewSet attribute), 37
attribute), 37 queryset (kubernetes_manager.views.model_views.KubernetesDeployment
attribute), 37

permission_classes (kuber- attribute), 37
netes_manager.views.model_views.KubernetesIngressViewSet (kubernetes_manager.views.model_views.KubernetesIngressView
attribute), 37 attribute), 37

permission_classes (kuber- queryset (kubernetes_manager.views.model_views.KubernetesJobViewSet
netes_manager.views.model_views.KubernetesJobViewSet attribute), 38
attribute), 38 queryset (kubernetes_manager.views.model_views.KubernetesNamespace
attribute), 38

permission_classes (kuber- attribute), 38
netes_manager.views.model_views.KubernetesNamespaceViewSet kubernetes_manager.views.model_views.KubernetesPodTempl
attribute), 38 attribute), 38

permission_classes (kuber- queryset (kubernetes_manager.views.model_views.KubernetesServiceView
netes_manager.views.model_views.KubernetesPodTemplateViewSet attribute), 39
attribute), 38 queryset (kubernetes_manager.views.model_views.KubernetesVolumeM
attribute), 39

permission_classes (kuber- attribute), 39
netes_manager.views.model_views.KubernetesServiceViewSet (kubernetes_manager.views.model_views.KubernetesVolumeView
attribute), 39 attribute), 39

permission_classes (kuber- queryset (kubernetes_manager.views.model_views.TargetClusterViewSet
netes_manager.views.model_views.KubernetesVolumeMountViewSet attribute), 39
attribute), 39

R

read_pod_metrics() (kubernetes_manager.models.mixins.KubernetesTelemetryMixin attribute), 37
 read_pod_usage() (kubernetes_manager.models.mixins.KubernetesTelemetryMixin attribute), 37
 remove() (kubernetes_manager.models.kube.KubernetesConfigMap attribute), 37
 remove() (kubernetes_manager.models.kube.KubernetesDeployment attribute), 38
 remove() (kubernetes_manager.models.kube.KubernetesIngress attribute), 38
 remove() (kubernetes_manager.models.kube.KubernetesJob attribute), 39
 remove() (kubernetes_manager.models.kube.KubernetesNamespace attribute), 39
 remove() (kubernetes_manager.models.kube.KubernetesService attribute), 39
 remove() (kubernetes_manager.views.model_views.KubernetesConfigMapViewSet attribute), 39
 remove() (kubernetes_manager.views.model_views.KubernetesDeploymentViewSet attribute), 39
 remove() (kubernetes_manager.views.model_views.KubernetesIngressViewSet attribute), 39
 remove() (kubernetes_manager.views.model_views.KubernetesJobViewSet attribute), 39
 remove() (kubernetes_manager.views.model_views.KubernetesNamespaceViewSet attribute), 39
 remove() (kubernetes_manager.views.model_views.KubernetesServiceViewSet attribute), 39
 removed(kubernetes_manager.models.base.KubernetesBase attribute), 9
 replicas(kubernetes_manager.models.kube.KubernetesDeployment attribute), 17
 restart_policy (kubernetes_manager.models.kube.KubernetesPodTemplate attribute), 24
 run_command() (in module kubernetes_manager.utils), 40

S

selector(kubernetes_manager.models.kube.KubernetesDeployment attribute), 17
 selector(kubernetes_manager.models.kube.KubernetesService attribute), 26
 serializer_class (kubernetes_manager.views.model_views.KubernetesConfigMapViewSet attribute), 37
 serializer_class (kubernetes_manager.views.model_views.KubernetesCommandView attribute), 37
 serializer_class (kubernetes_manager.views.model_views.KubernetesDeploymentView attribute), 37
 status() (kubernetes_manager.models.mixins.KubernetesTelemetryMixin method), 29
 sub_path(kubernetes_manager.models.kube.KubernetesVolumeMount attribute), 28
 target_port (kubernetes_manager.models.kube.KubernetesService attribute), 26
 target_service (kubernetes_manager.models.kube.KubernetesIngress attribute), 18
 target_service_id (kubernetes_manager.models.kube.KubernetesIngress attribute), 18
 TargetCluster (class in kubernetes_manager.models.target_cluster), 30
 TargetCluster.DoesNotExist, 30
 TargetCluster.MultipleObjectsReturned, 30

TargetClusterSerializer (class in *kubernetes_manager.serializers.base*), 36
TargetClusterSerializer.Meta (class in *kubernetes_manager.serializers.base*), 36
TargetClusterViewSet (class in *kubernetes_manager.views.model_views*), 39
telemetry_endpoint (kubernetes_manager.models.target_cluster.TargetCluster attribute), 32
telemetry_source (kubernetes_manager.models.target_cluster.TargetCluster attribute), 33

V

volume_mounts (kubernetes_manager.models.kube.KubernetesContainer attribute), 15
volumes (kubernetes_manager.models.kube.KubernetesPodTemplate attribute), 24