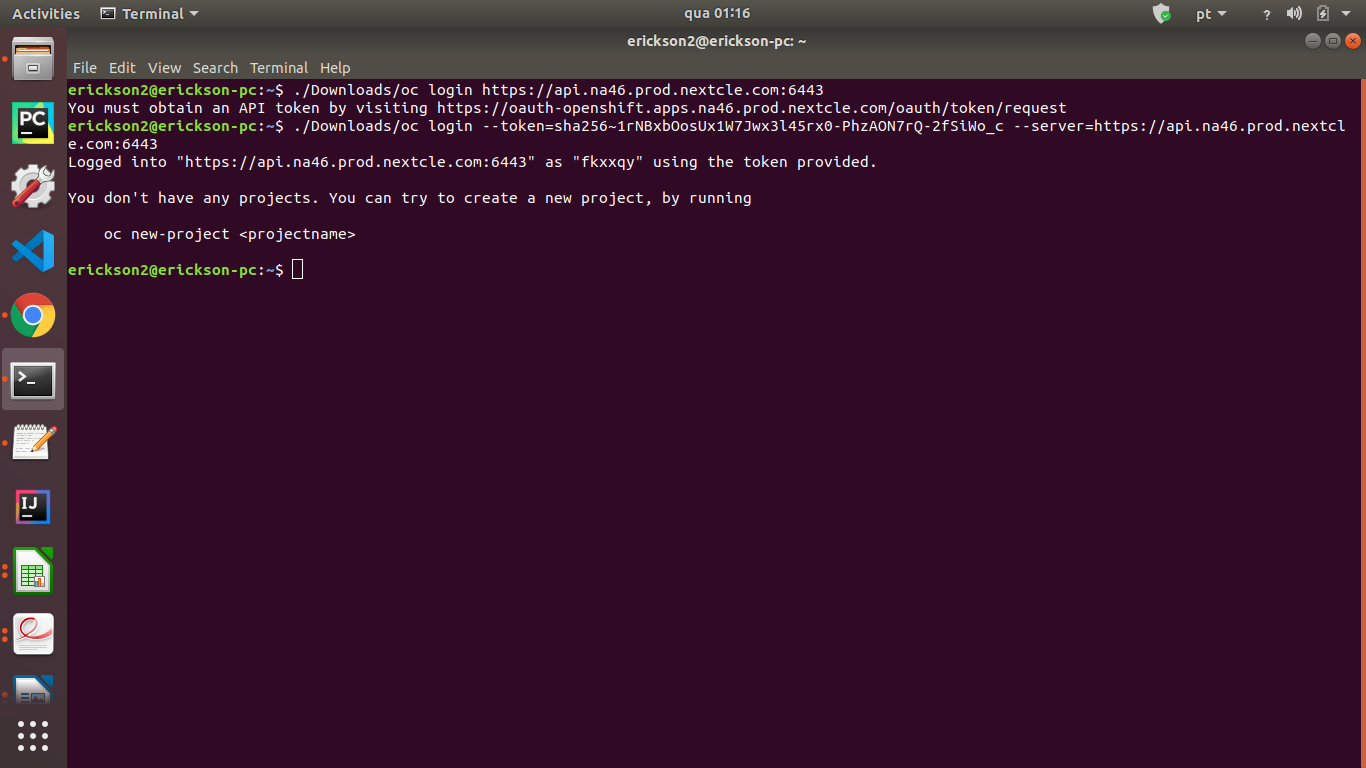
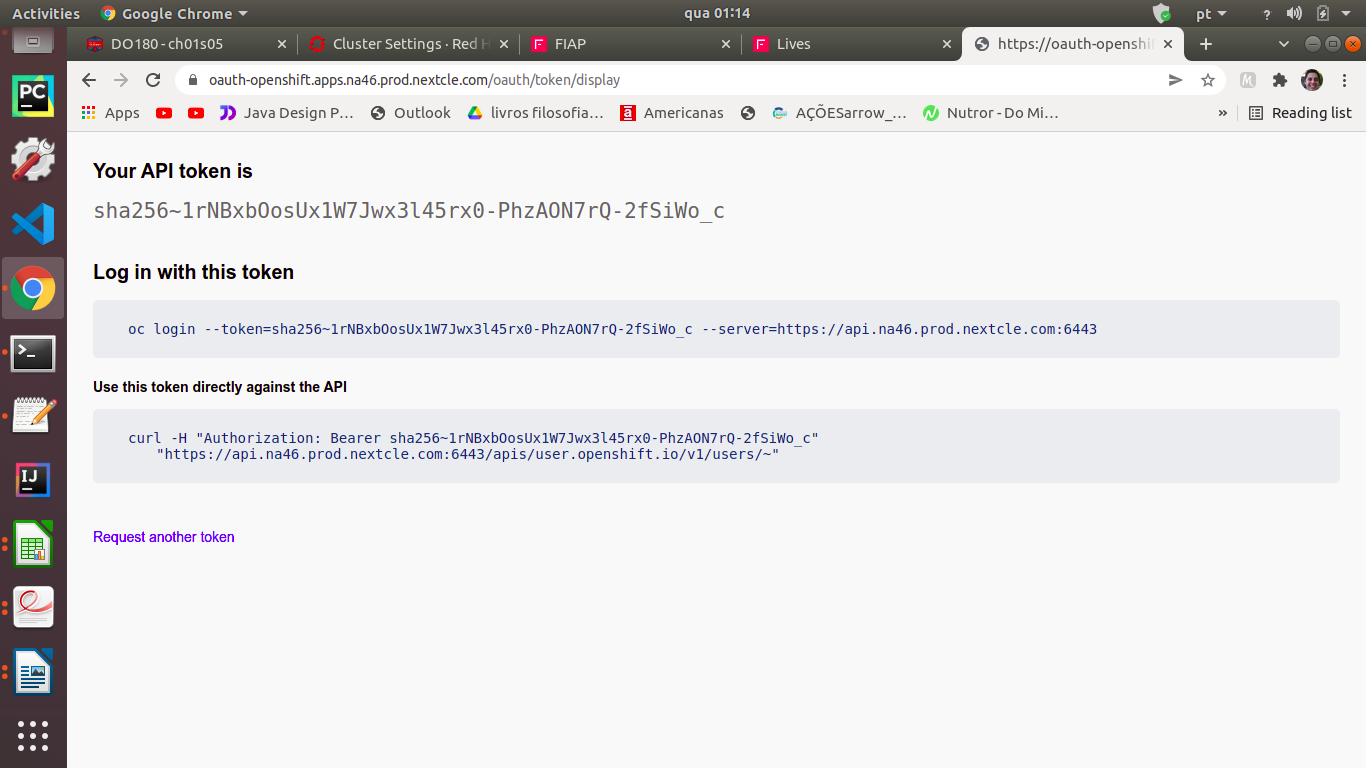
./Downloads/oc login [https://api.na46.prod.nextcle.com:6443](https://api.na46.prod.nextcle.com:6443/)

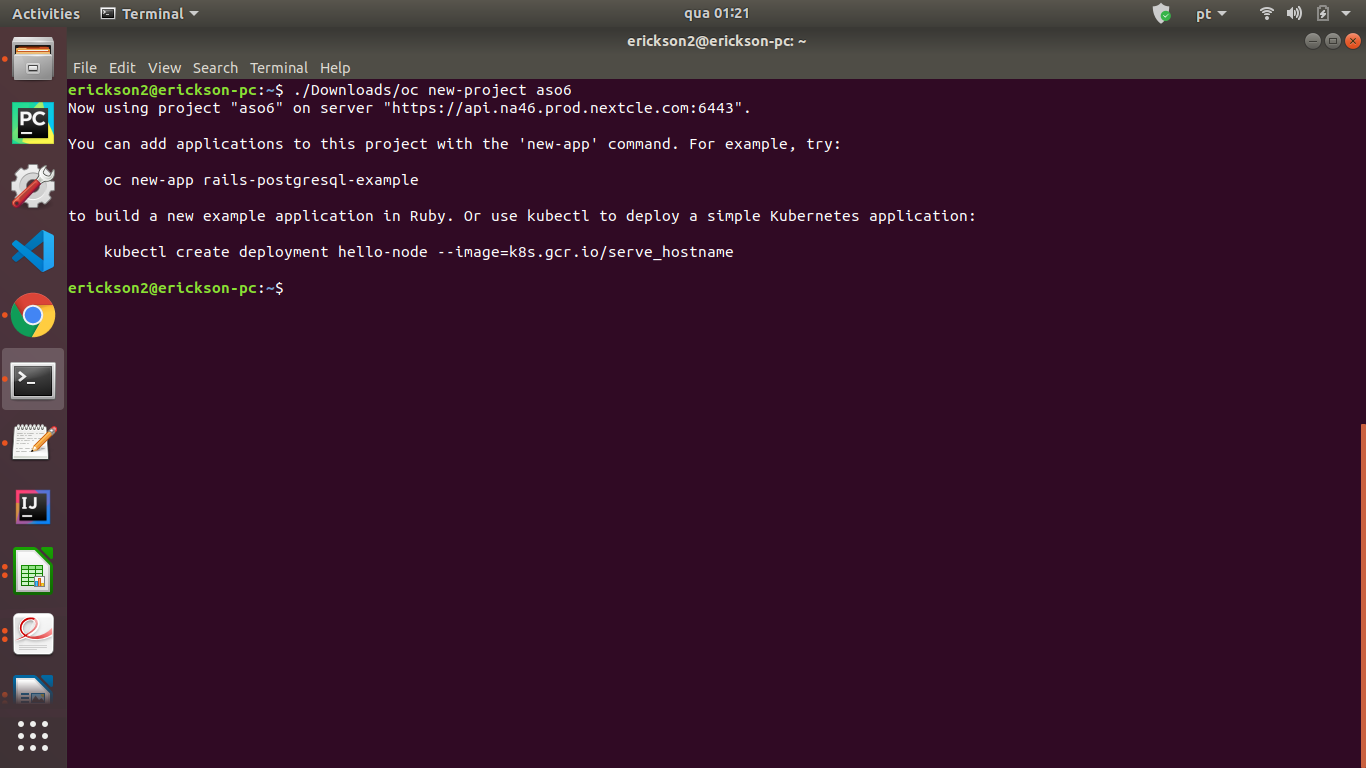
A api retorna um link para obtenção do token que permitirá a conexão



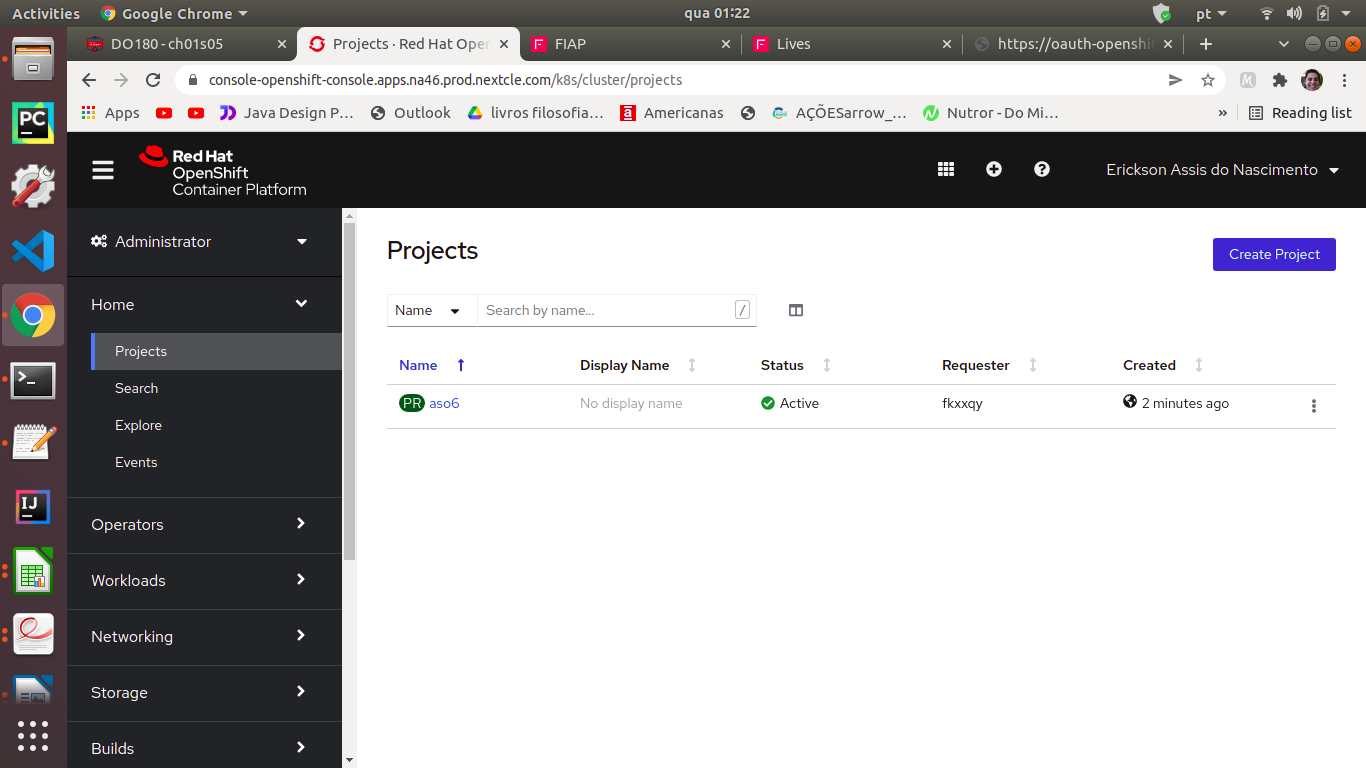
You must obtain an API token by visiting <https://oauth-openshift.apps.na46.prod.nextcle.com/oauth/token/request>

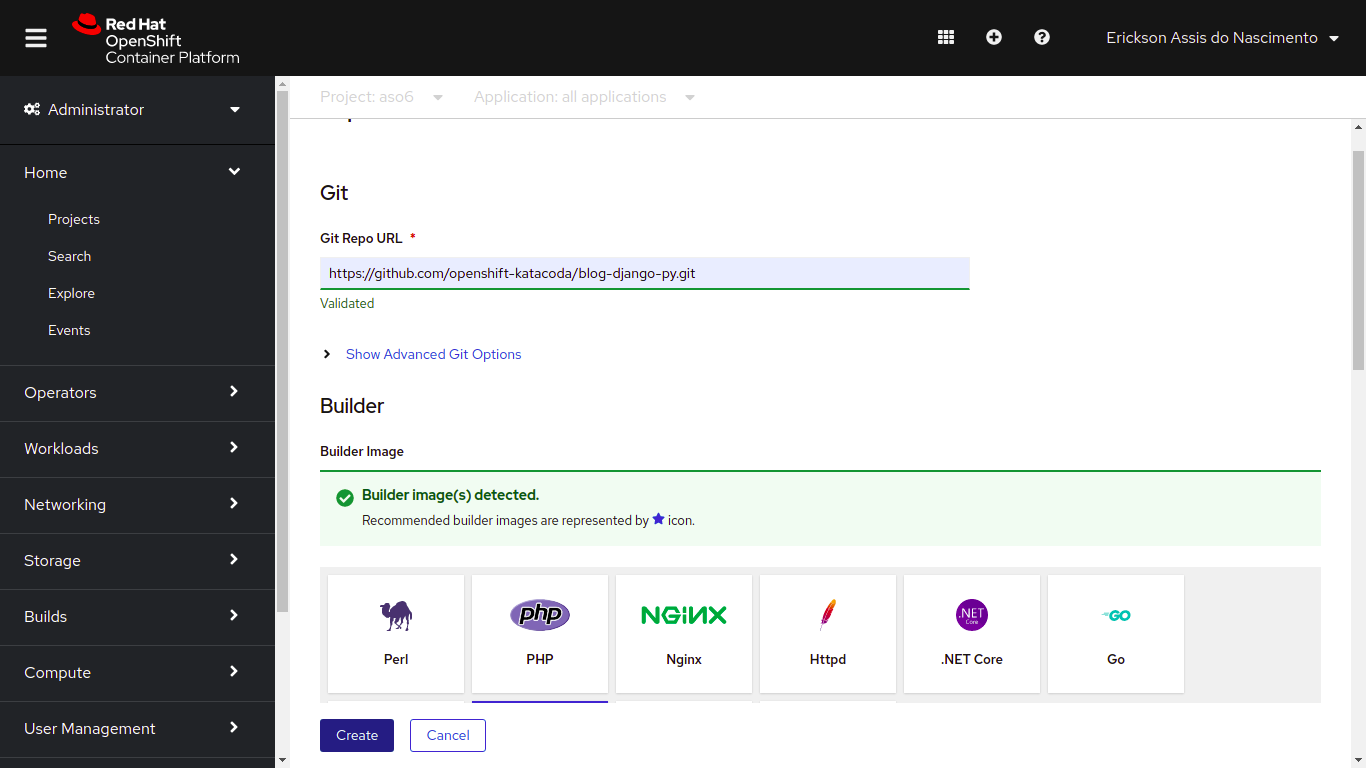
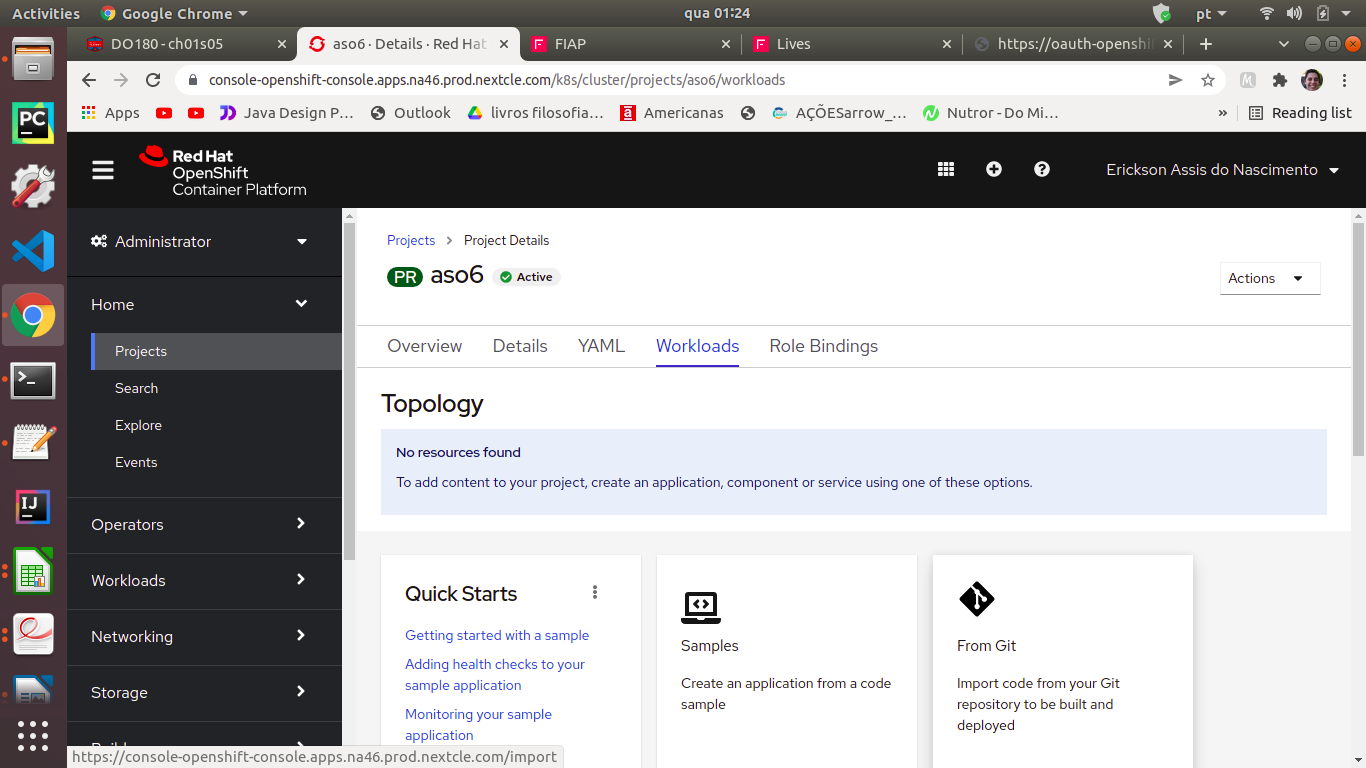


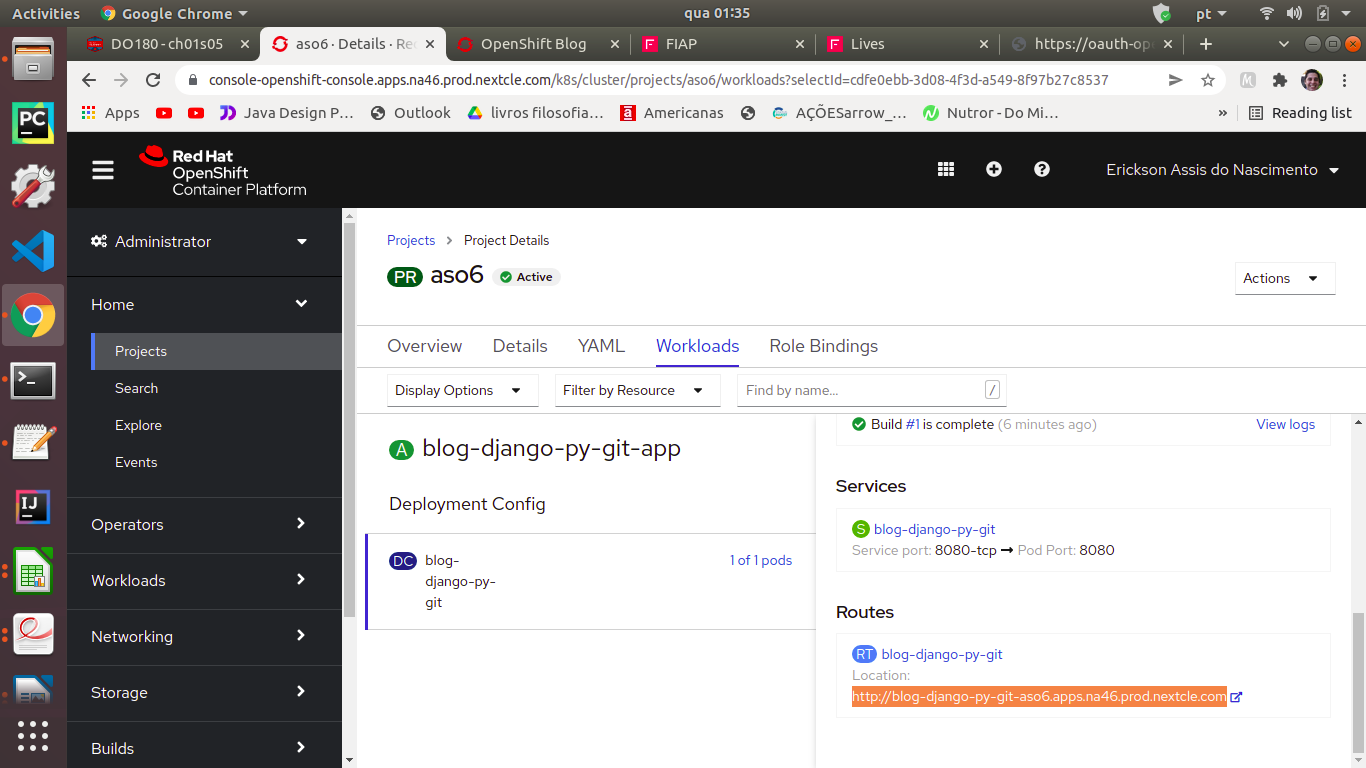
Criação de um novo projeto



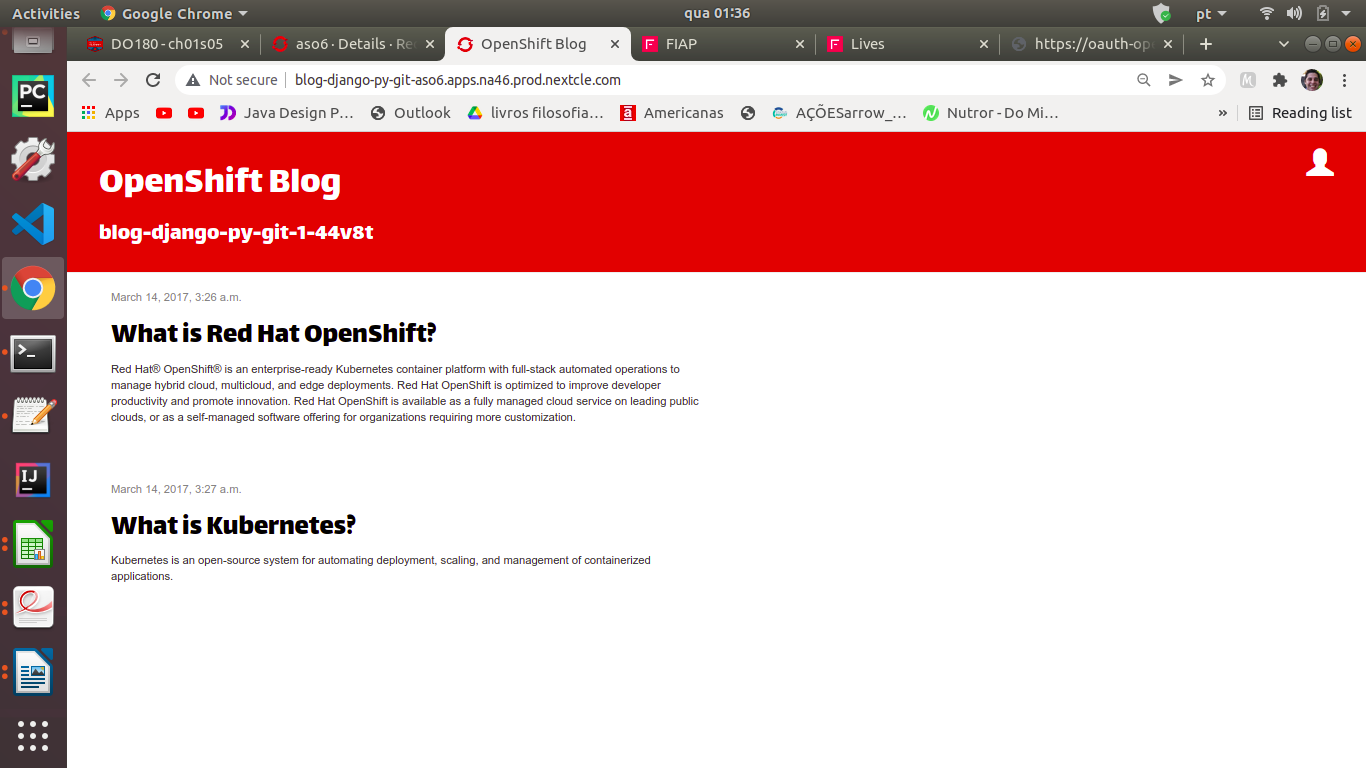
O projeto será criado na área de projetos do openshift



Importaremos o código base do projeto usando a opção From git

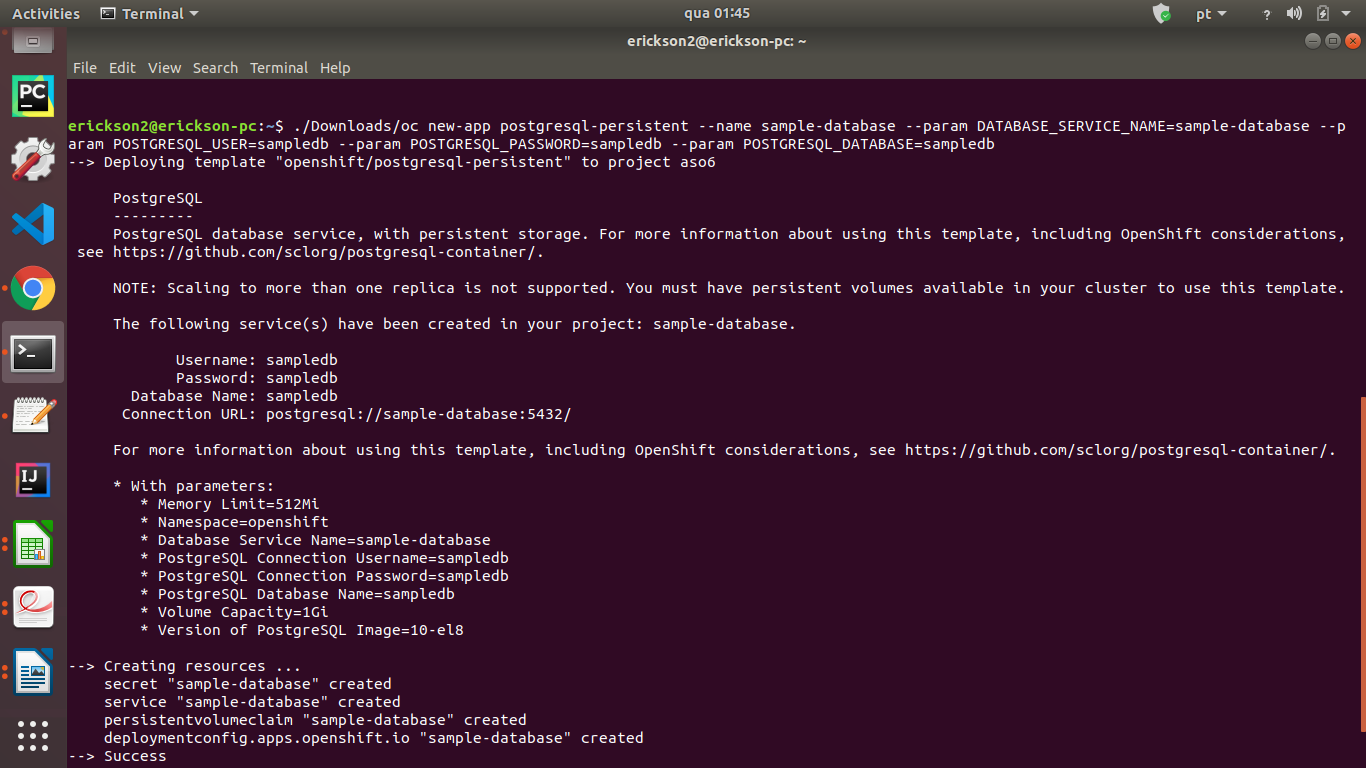


O openshift se encarregará de criar toda estrutura do projeto e provisioná-lo, criando inclusive a rota para acesso à aplicação:



Para podermos criar posts no blog precisamos adicionar uma camada de persistência:

./oc new-app postgresql-persistent --name sample-database --param DATABASE\_SERVICE\_NAME=sample-database --param POSTGRESQL\_USER=sampledb --param POSTGRESQL\_PASSWORD=sampledb --param POSTGRESQL\_DATABASE=sampledb

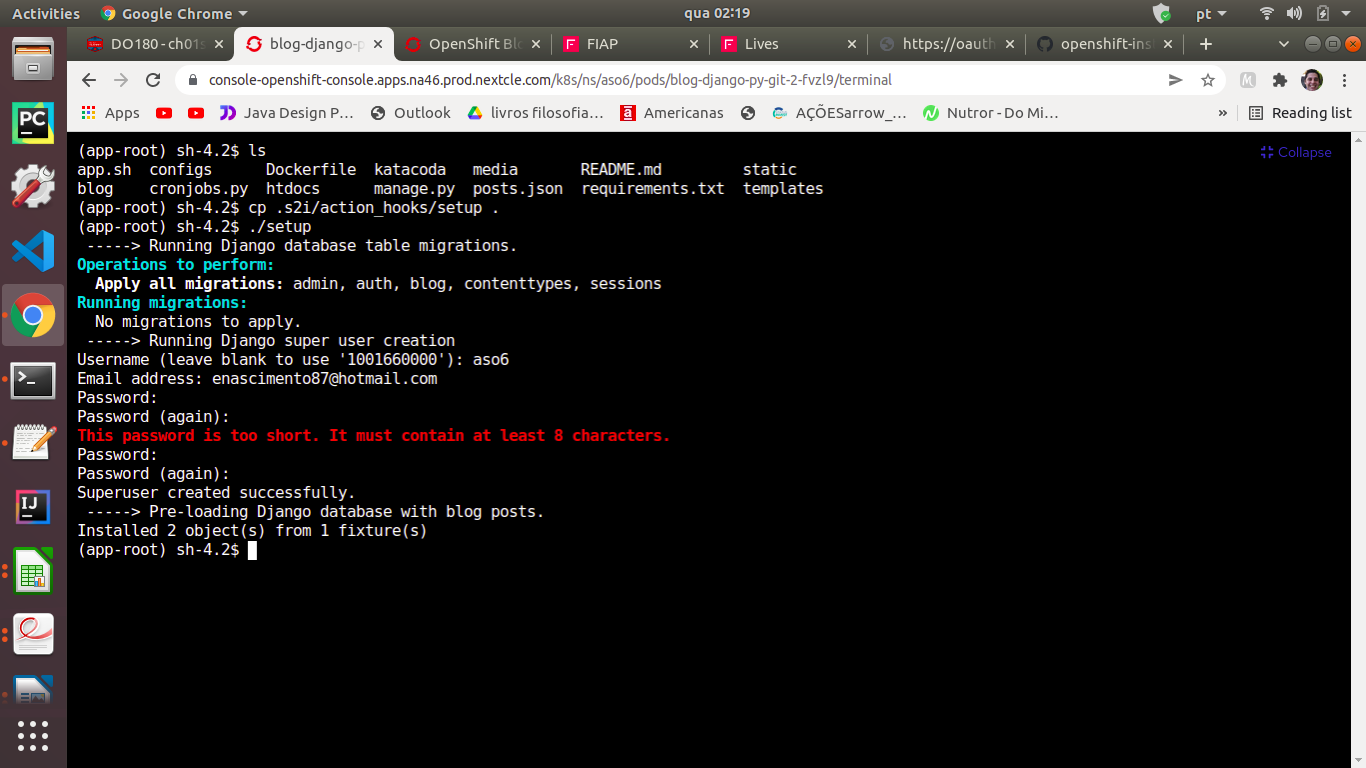
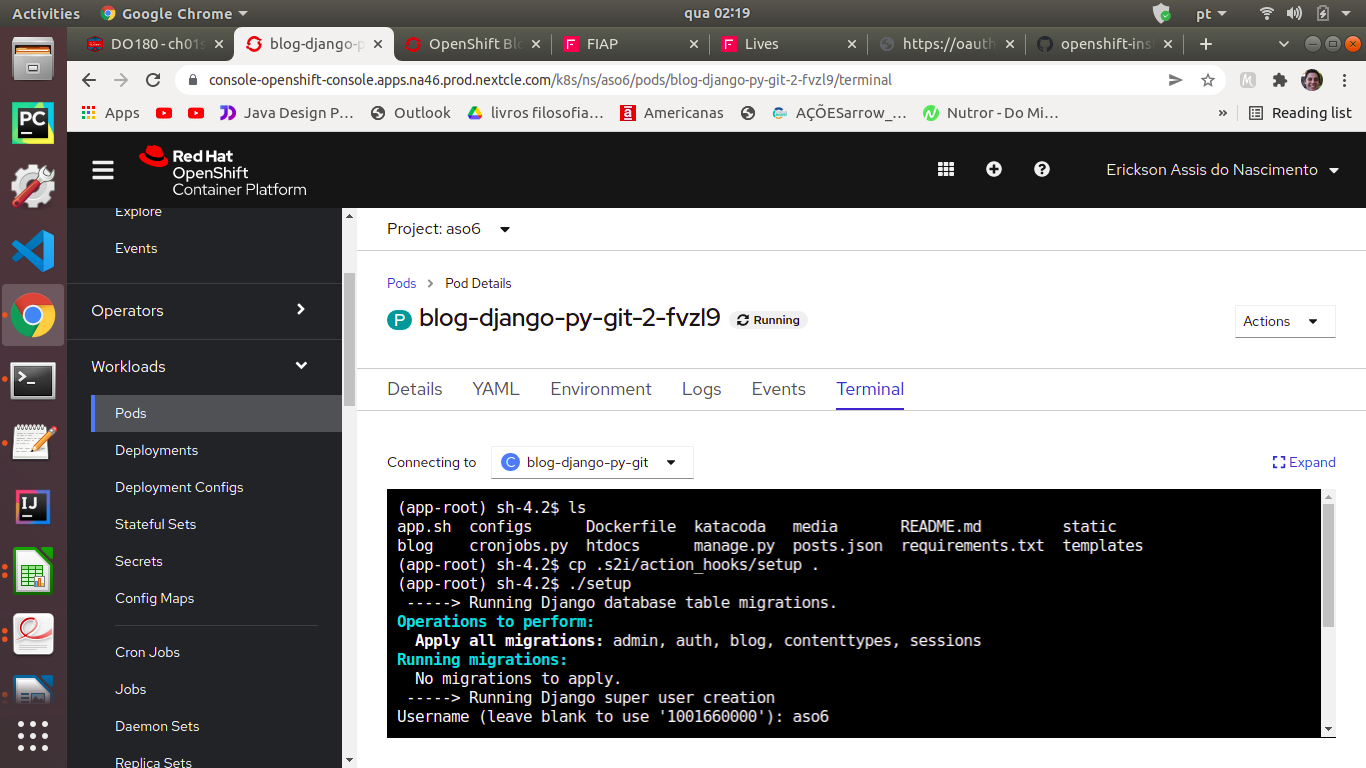


A aplicação precisará ser reconfigurada para se comunicar com o banco de dados recém criado.

./oc set env deployment blog-django-py-git DATABASE\_URL=postgresql://sampledb:[sampledb@sample-database](mailto:sampledb@sample-database):5432/sampledb

erickson2@erickson-pc:~$ ./Downloads/oc set env deploymentconfig blog-django-py-git DATABASE\_URL=postgresql://sampledb:sampledb@sample-database:5432/sampledb

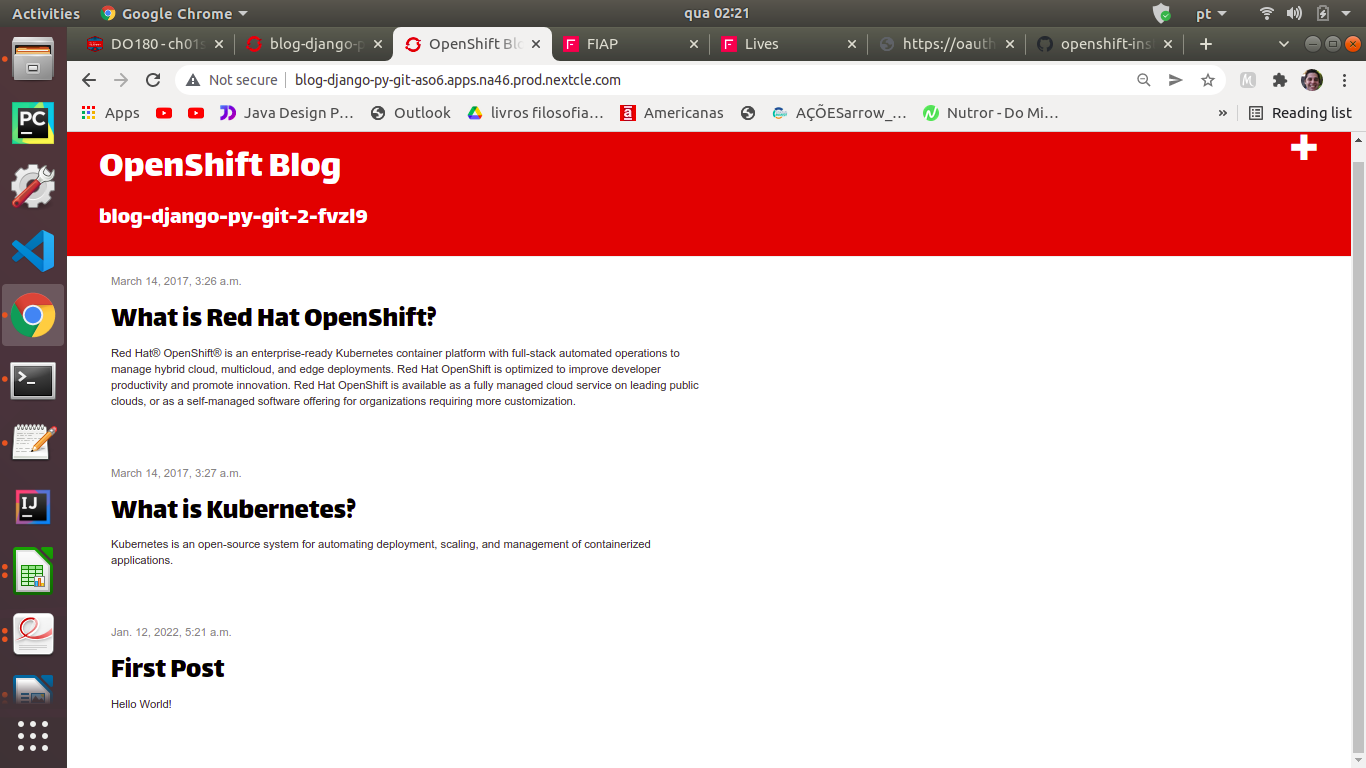
deploymentconfig.apps.openshift.io/blog-django-py-git updated



username: aso6

password:aso62022

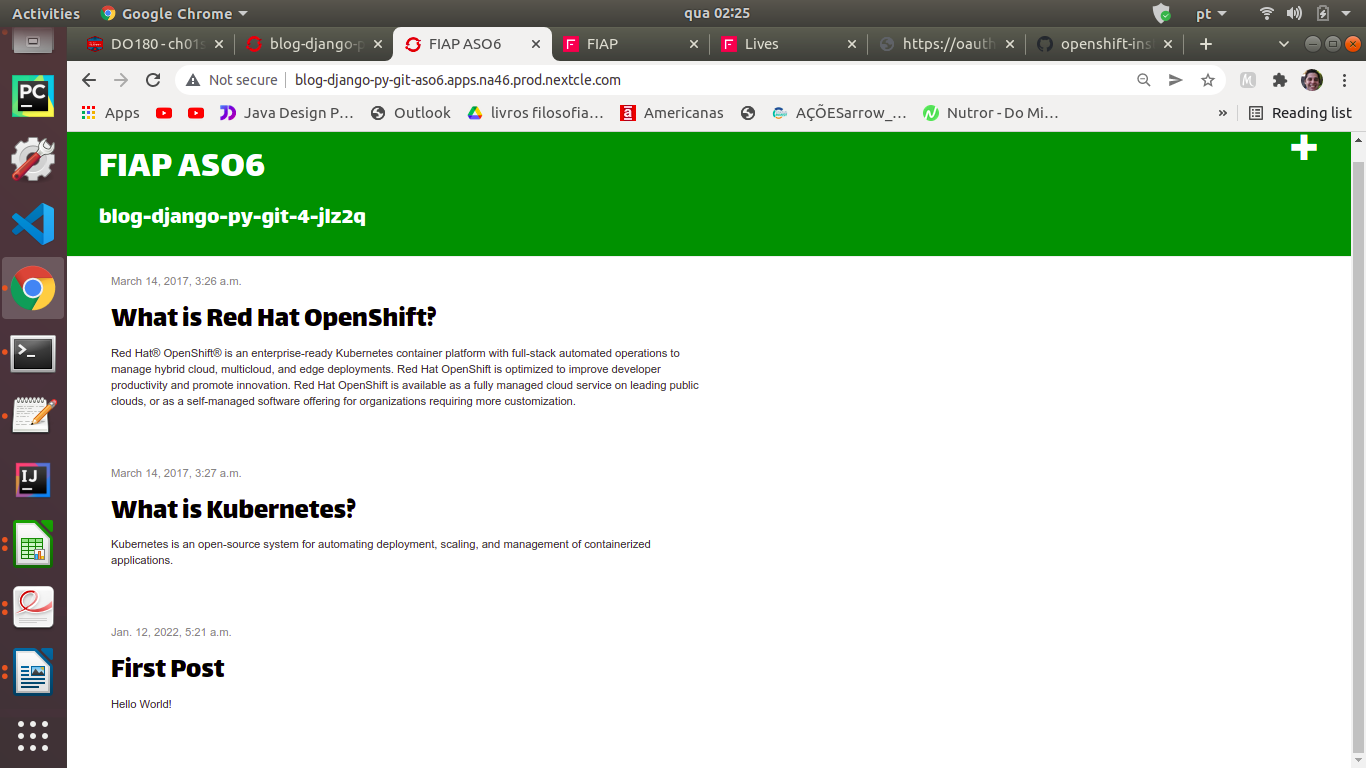
Agora será possível escrever posts persistentes:



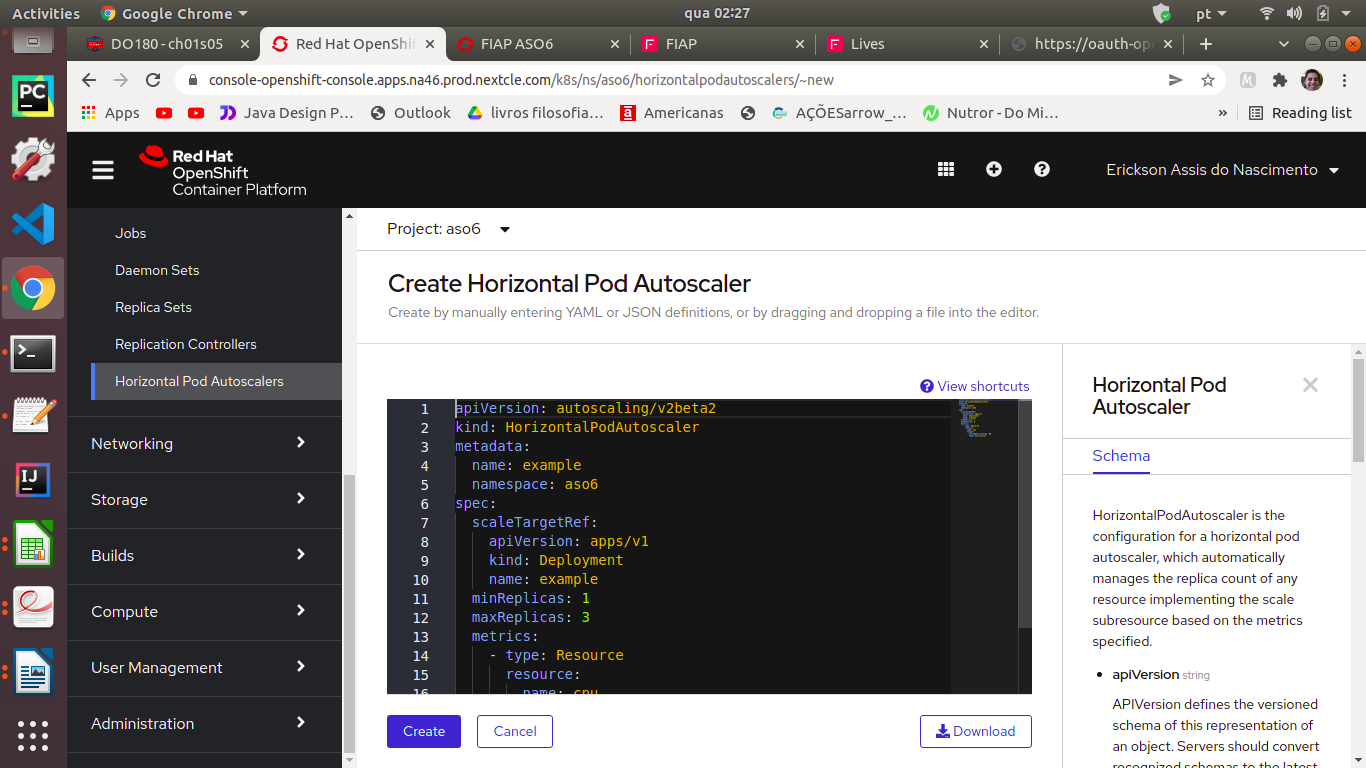
Alterando propriedades da aplicação

erickson2@erickson-pc:~$ ./oc set env deploymentconfig blog-django-py-git BLOG\_BANNER\_COLOR=green

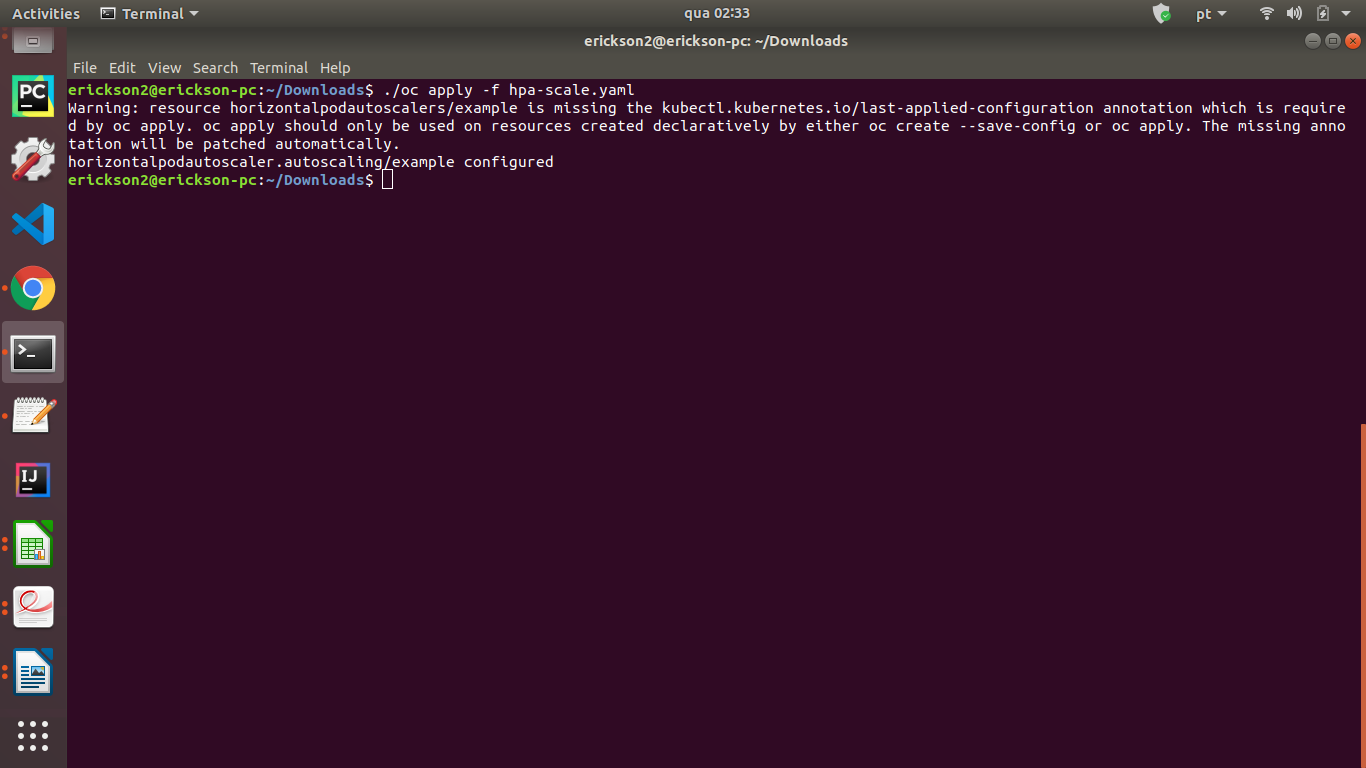
erickson2@erickson-pc:~$ ./Downloads/oc set env deploymentconfig blog-django-py-git BLOG\_SITE\_NAME='FIAP ASO6'



Criação de AutoScaler

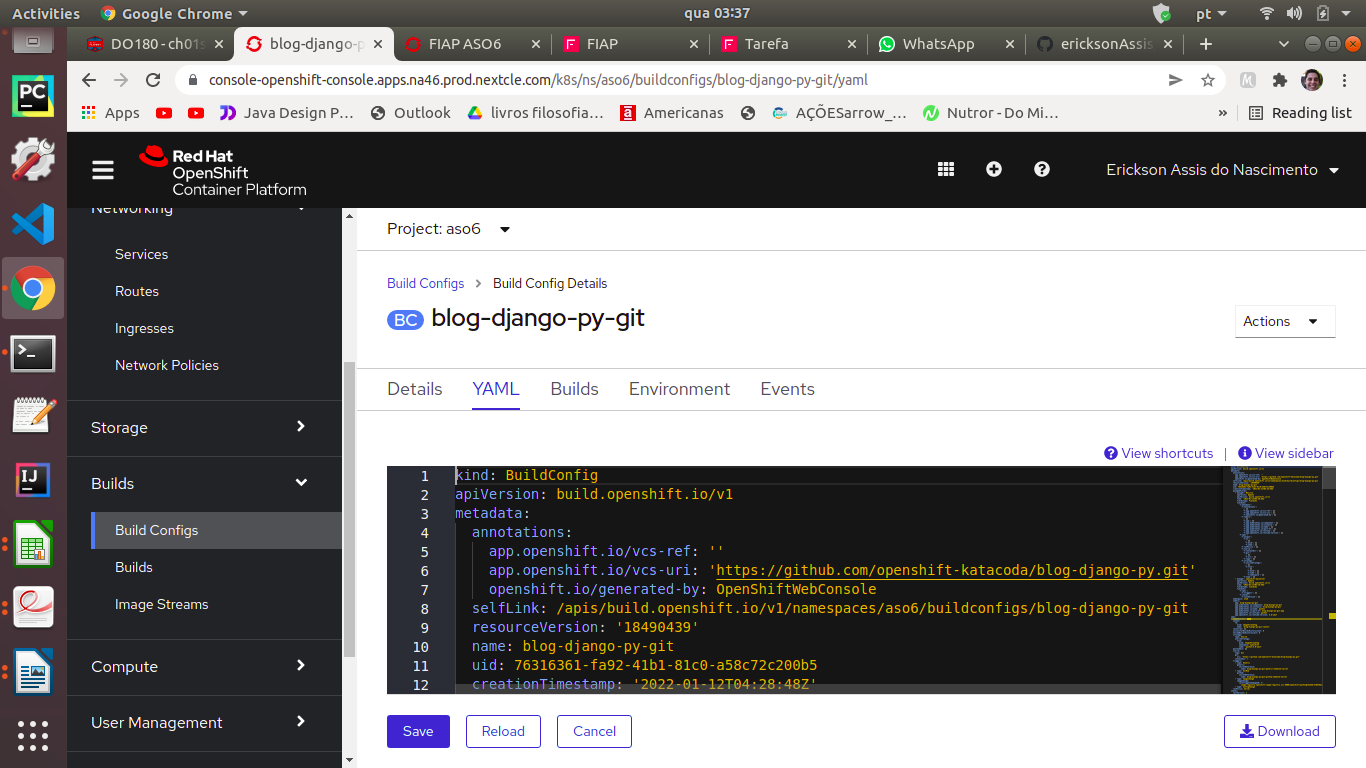


Via terminal



Arquivos para automação

buildconfig-blog-django-py-git.yaml



kind: BuildConfig

apiVersion: build.openshift.io/v1

metadata:

annotations:

app.openshift.io/vcs-ref: ''

app.openshift.io/vcs-uri: 'https://github.com/openshift-katacoda/blog-django-py.git'

openshift.io/generated-by: OpenShiftWebConsole

selfLink: /apis/build.openshift.io/v1/namespaces/aso6/buildconfigs/blog-django-py-git

resourceVersion: '18490439'

name: blog-django-py-git

uid: 76316361-fa92-41b1-81c0-a58c72c200b5

creationTimestamp: '2022-01-12T04:28:48Z'

managedFields:

- manager: Mozilla

operation: Update

apiVersion: build.openshift.io/v1

time: '2022-01-12T04:28:48Z'

fieldsType: FieldsV1

fieldsV1:

'f:metadata':

'f:annotations':

.: {}

'f:app.openshift.io/vcs-ref': {}

'f:app.openshift.io/vcs-uri': {}

'f:openshift.io/generated-by': {}

'f:labels':

.: {}

'f:app': {}

'f:app.kubernetes.io/component': {}

'f:app.kubernetes.io/instance': {}

'f:app.kubernetes.io/name': {}

'f:app.kubernetes.io/part-of': {}

'f:app.openshift.io/runtime': {}

'f:app.openshift.io/runtime-version': {}

'f:spec':

'f:output':

'f:to':

.: {}

'f:kind': {}

'f:name': {}

'f:runPolicy': {}

'f:source':

'f:contextDir': {}

'f:git':

.: {}

'f:uri': {}

'f:type': {}

'f:strategy':

'f:sourceStrategy':

.: {}

'f:from':

.: {}

'f:kind': {}

'f:name': {}

'f:namespace': {}

'f:type': {}

- manager: openshift-apiserver

operation: Update

apiVersion: build.openshift.io/v1

time: '2022-01-12T04:28:49Z'

fieldsType: FieldsV1

fieldsV1:

'f:spec':

'f:triggers': {}

'f:status':

'f:lastVersion': {}

namespace: aso6

labels:

app: blog-django-py-git

app.kubernetes.io/component: blog-django-py-git

app.kubernetes.io/instance: blog-django-py-git

app.kubernetes.io/name: python

app.kubernetes.io/part-of: blog-django-py-git-app

app.openshift.io/runtime: python

app.openshift.io/runtime-version: 3.8-ubi7

spec:

nodeSelector: null

output:

to:

kind: ImageStreamTag

name: 'blog-django-py-git:latest'

resources: {}

successfulBuildsHistoryLimit: 5

failedBuildsHistoryLimit: 5

strategy:

type: Source

sourceStrategy:

from:

kind: ImageStreamTag

namespace: openshift

name: 'python:3.8-ubi7'

postCommit: {}

source:

type: Git

git:

uri: 'https://github.com/openshift-katacoda/blog-django-py.git'

contextDir: /

triggers:

- type: Generic

generic:

secretReference:

name: blog-django-py-git-generic-webhook-secret

- type: GitHub

github:

secretReference:

name: blog-django-py-git-github-webhook-secret

- type: ImageChange

imageChange:

lastTriggeredImageID: >-

image-registry.openshift-image-registry.svc:5000/openshift/python@sha256:210326ea7d1a940d7e8f057cc96a6115c8443658b91a95d6c0ddc91ad80566cd

- type: ConfigChange

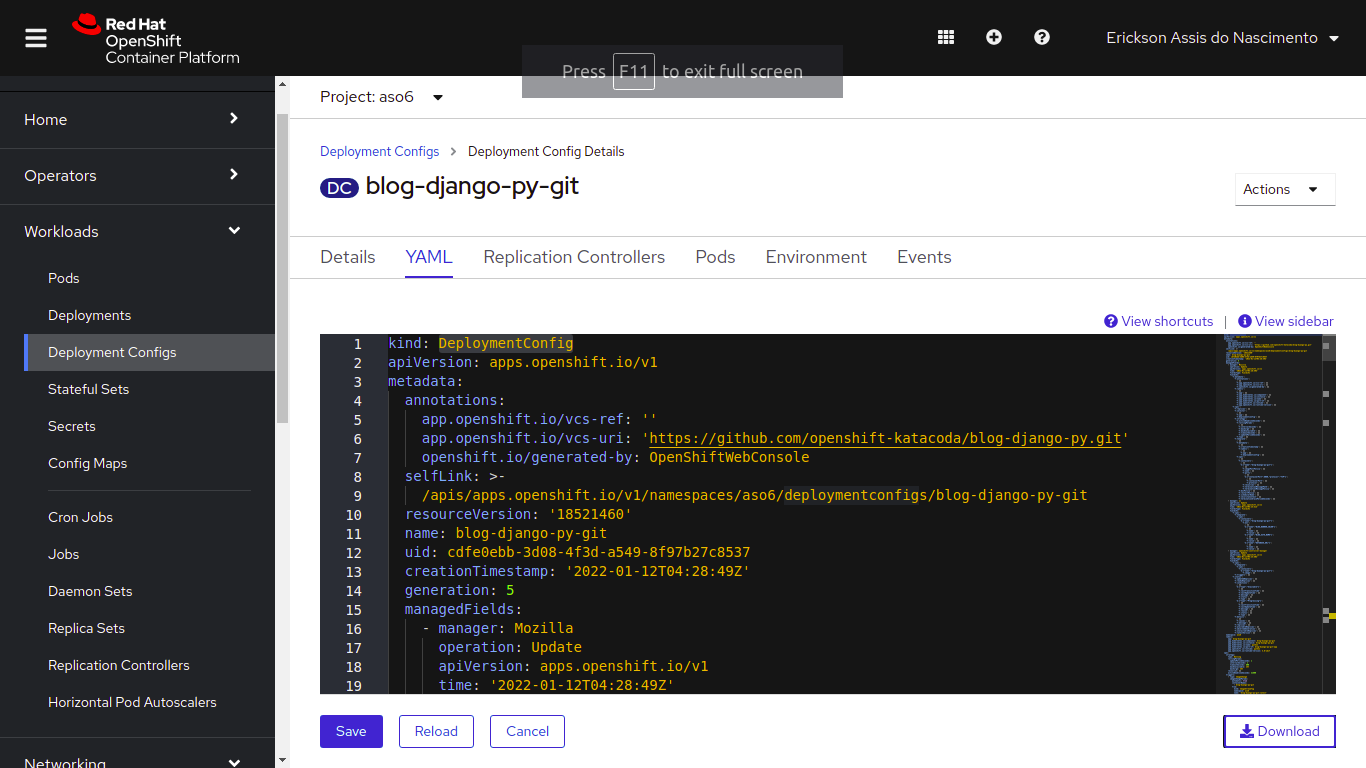
runPolicy: Serial

status:

lastVersion: 1

DeploymentConfig

deploymentconfig-blog-django-py-git.yaml



kind: DeploymentConfig

apiVersion: apps.openshift.io/v1

metadata:

annotations:

app.openshift.io/vcs-ref: ''

app.openshift.io/vcs-uri: 'https://github.com/openshift-katacoda/blog-django-py.git'

openshift.io/generated-by: OpenShiftWebConsole

selfLink: >-

/apis/apps.openshift.io/v1/namespaces/aso6/deploymentconfigs/blog-django-py-git

resourceVersion: '18521460'

name: blog-django-py-git

uid: cdfe0ebb-3d08-4f3d-a549-8f97b27c8537

creationTimestamp: '2022-01-12T04:28:49Z'

generation: 5

managedFields:

- manager: Mozilla

operation: Update

apiVersion: apps.openshift.io/v1

time: '2022-01-12T04:28:49Z'

fieldsType: FieldsV1

fieldsV1:

'f:metadata':

'f:annotations':

.: {}

'f:app.openshift.io/vcs-ref': {}

'f:app.openshift.io/vcs-uri': {}

'f:openshift.io/generated-by': {}

'f:labels':

.: {}

'f:app': {}

'f:app.kubernetes.io/component': {}

'f:app.kubernetes.io/instance': {}

'f:app.kubernetes.io/name': {}

'f:app.kubernetes.io/part-of': {}

'f:app.openshift.io/runtime': {}

'f:app.openshift.io/runtime-version': {}

'f:spec':

'f:replicas': {}

'f:selector':

.: {}

'f:app': {}

'f:deploymentconfig': {}

'f:strategy':

'f:activeDeadlineSeconds': {}

'f:rollingParams':

.: {}

'f:intervalSeconds': {}

'f:maxSurge': {}

'f:maxUnavailable': {}

'f:timeoutSeconds': {}

'f:updatePeriodSeconds': {}

'f:type': {}

'f:template':

.: {}

'f:metadata':

.: {}

'f:creationTimestamp': {}

'f:labels':

.: {}

'f:app': {}

'f:deploymentconfig': {}

'f:spec':

.: {}

'f:containers':

.: {}

'k:{"name":"blog-django-py-git"}':

.: {}

'f:imagePullPolicy': {}

'f:name': {}

'f:ports':

.: {}

'k:{"containerPort":8080,"protocol":"TCP"}':

.: {}

'f:containerPort': {}

'f:protocol': {}

'f:resources': {}

'f:terminationMessagePath': {}

'f:terminationMessagePolicy': {}

'f:dnsPolicy': {}

'f:restartPolicy': {}

'f:schedulerName': {}

'f:securityContext': {}

'f:terminationGracePeriodSeconds': {}

- manager: oc

operation: Update

apiVersion: apps.openshift.io/v1

time: '2022-01-12T05:24:41Z'

fieldsType: FieldsV1

fieldsV1:

'f:spec':

'f:template':

'f:spec':

'f:containers':

'k:{"name":"blog-django-py-git"}':

'f:env':

.: {}

'k:{"name":"BLOG\_BANNER\_COLOR"}':

.: {}

'f:name': {}

'f:value': {}

'k:{"name":"BLOG\_SITE\_NAME"}':

.: {}

'f:name': {}

'f:value': {}

'k:{"name":"DATABASE\_URL"}':

.: {}

'f:name': {}

'f:value': {}

- manager: openshift-controller-manager

operation: Update

apiVersion: apps.openshift.io/v1

time: '2022-01-12T05:24:50Z'

fieldsType: FieldsV1

fieldsV1:

'f:spec':

'f:template':

'f:spec':

'f:containers':

'k:{"name":"blog-django-py-git"}':

'f:image': {}

'f:triggers': {}

'f:status':

'f:updatedReplicas': {}

'f:readyReplicas': {}

'f:conditions':

.: {}

'k:{"type":"Available"}':

.: {}

'f:lastTransitionTime': {}

'f:lastUpdateTime': {}

'f:message': {}

'f:status': {}

'f:type': {}

'k:{"type":"Progressing"}':

.: {}

'f:lastTransitionTime': {}

'f:lastUpdateTime': {}

'f:message': {}

'f:reason': {}

'f:status': {}

'f:type': {}

'f:details':

.: {}

'f:causes': {}

'f:message': {}

'f:replicas': {}

'f:availableReplicas': {}

'f:observedGeneration': {}

'f:unavailableReplicas': {}

'f:latestVersion': {}

namespace: aso6

labels:

app: blog-django-py-git

app.kubernetes.io/component: blog-django-py-git

app.kubernetes.io/instance: blog-django-py-git

app.kubernetes.io/name: python

app.kubernetes.io/part-of: blog-django-py-git-app

app.openshift.io/runtime: python

app.openshift.io/runtime-version: 3.8-ubi7

spec:

strategy:

type: Rolling

rollingParams:

updatePeriodSeconds: 1

intervalSeconds: 1

timeoutSeconds: 600

maxUnavailable: 25%

maxSurge: 25%

resources: {}

activeDeadlineSeconds: 21600

triggers:

- type: ImageChange

imageChangeParams:

automatic: true

containerNames:

- blog-django-py-git

from:

kind: ImageStreamTag

namespace: aso6

name: 'blog-django-py-git:latest'

lastTriggeredImage: >-

image-registry.openshift-image-registry.svc:5000/aso6/blog-django-py-git@sha256:4b0af74963e024236341ad83b75f88a6e4da284fea6b37bd7e0ba7311f607e0a

- type: ConfigChange

replicas: 1

revisionHistoryLimit: 10

test: false

selector:

app: blog-django-py-git

deploymentconfig: blog-django-py-git

template:

metadata:

creationTimestamp: null

labels:

app: blog-django-py-git

deploymentconfig: blog-django-py-git

spec:

containers:

- name: blog-django-py-git

image: >-

image-registry.openshift-image-registry.svc:5000/aso6/blog-django-py-git@sha256:4b0af74963e024236341ad83b75f88a6e4da284fea6b37bd7e0ba7311f607e0a

ports:

- containerPort: 8080

protocol: TCP

env:

- name: DATABASE\_URL

value: 'postgresql://sampledb:sampledb@sample-database:5432/sampledb'

- name: BLOG\_BANNER\_COLOR

value: green

- name: BLOG\_SITE\_NAME

value: FIAP ASO6

resources: {}

terminationMessagePath: /dev/termination-log

terminationMessagePolicy: File

imagePullPolicy: Always

restartPolicy: Always

terminationGracePeriodSeconds: 30

dnsPolicy: ClusterFirst

securityContext: {}

schedulerName: default-scheduler

status:

observedGeneration: 5

details:

message: config change

causes:

- type: ConfigChange

availableReplicas: 1

unavailableReplicas: 0

latestVersion: 4

updatedReplicas: 1

conditions:

- type: Available

status: 'True'

lastUpdateTime: '2022-01-12T04:30:03Z'

lastTransitionTime: '2022-01-12T04:30:03Z'

message: Deployment config has minimum availability.

- type: Progressing

status: 'True'

lastUpdateTime: '2022-01-12T05:24:50Z'

lastTransitionTime: '2022-01-12T05:24:48Z'

reason: NewReplicationControllerAvailable

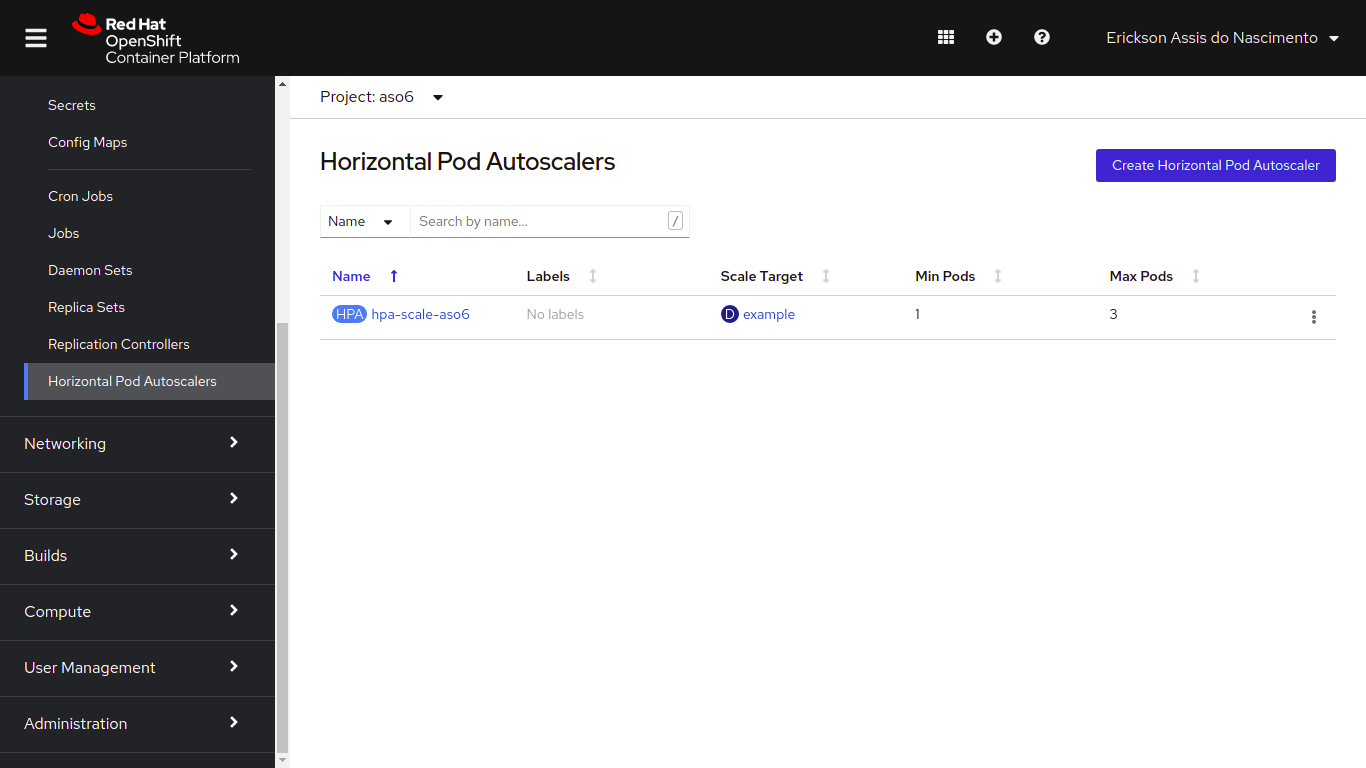
message: replication controller "blog-django-py-git-4" successfully rolled out

replicas: 1

readyReplicas: 1

Hpa-scale.yaml

Na criação do HPA temos um example que podemos baixar e customizar.



apiVersion: autoscaling/v2beta2

kind: HorizontalPodAutoscaler

metadata:

name: hpa-scale-aso6

namespace: aso6

spec:

scaleTargetRef:

apiVersion: apps/v1

kind: Deployment

name: example

minReplicas: 1

maxReplicas: 3

metrics:

- type: Resource

resource:

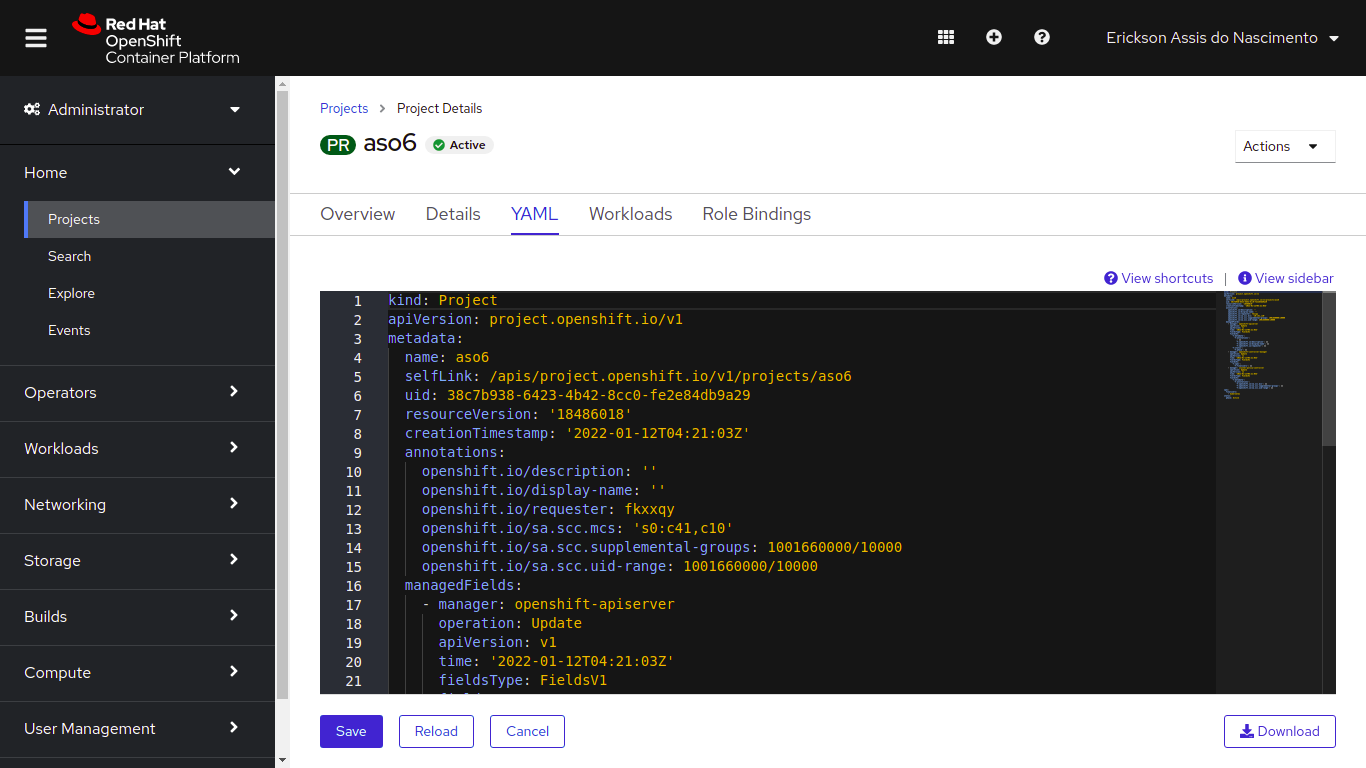
name: cpu

target:

averageUtilization: 50

type: Utilization

Project.yaml



kind: Project

apiVersion: project.openshift.io/v1

metadata:

name: aso6

selfLink: /apis/project.openshift.io/v1/projects/aso6

uid: 38c7b938-6423-4b42-8cc0-fe2e84db9a29

resourceVersion: '18486018'

creationTimestamp: '2022-01-12T04:21:03Z'

annotations:

openshift.io/description: ''

openshift.io/display-name: ''

openshift.io/requester: fkxxqy

openshift.io/sa.scc.mcs: 's0:c41,c10'

openshift.io/sa.scc.supplemental-groups: 1001660000/10000

openshift.io/sa.scc.uid-range: 1001660000/10000

managedFields:

- manager: openshift-apiserver

operation: Update

apiVersion: v1

time: '2022-01-12T04:21:03Z'

fieldsType: FieldsV1

fieldsV1:

'f:metadata':

'f:annotations':

.: {}

'f:openshift.io/description': {}

'f:openshift.io/display-name': {}

'f:openshift.io/requester': {}

'f:status':

'f:phase': {}

- manager: openshift-controller-manager

operation: Update

apiVersion: v1

time: '2022-01-12T04:21:03Z'

fieldsType: FieldsV1

fieldsV1:

'f:spec':

'f:finalizers': {}

- manager: cluster-policy-controller

operation: Update

apiVersion: v1

time: '2022-01-12T04:21:04Z'

fieldsType: FieldsV1

fieldsV1:

'f:metadata':

'f:annotations':

'f:openshift.io/sa.scc.mcs': {}

'f:openshift.io/sa.scc.supplemental-groups': {}

'f:openshift.io/sa.scc.uid-range': {}

spec:

finalizers:

- kubernetes

status:

phase: Active