minikube config set memory 12228

minikube config set cpus 4

minikube config set disk-size 60000MB

minikube config set vm-driver virtualbox

minikube delete

minikube start --insecure-registry="mx.com.smi.services:30402"

Wait …

Minikube ip

172.16.193.170

Check vs host file 🡪

Kubectl get all

--crea db master/slave

--checa heml list

helm repo list

helm repo add stable <https://kubernetes-charts.storage.googleapis.com>

helm repo add presslabs <https://presslabs.github.io/charts>

helm repo update

helm install mysql-cluster-mariadb stable/mariadb -f db-cluster-deployment.yaml

auxiliaries:

#helm uninstall mysql-cluster-mariadb

#kubectl logs -f mysql-cluster-mariadb-master-0 -c mariadb

#kubectl logs -f mysql-cluster-mariadb-master-0 -c metrics

--crea db standalone

kubectl apply -f .\db-a-deployment.yaml

--crea backend wildfly+war

kubectl apply -f .\backend-a-deployment.yaml

--crea frontend

kubectl apply -f .\front-a-deployment.yaml

--crea ingress

kubectl apply -f .\bus-ingress.yaml

--crea Jenkins

kubectl apply -f .\jenkins-a-deployment.yaml

kubectl describe por <pod-name-jenkins>

obtener el contariner id 🡪 7e35769e60701c509ad1dfc730f8e73886a867995f86398d0434449e3adc8de4

minikube ssh

Docker exec -it -u <container id> bash

#en minikube ssh dar permisos:

#  sudo chown 1000 /data/jenkins\_home/

Wait…. Running

kubectl apply -f role2.yaml

**Configure Jenkins**

Kubectl logs -f <pod name>

Extract from log password: 101b64775ad446e6954a924f1c7e5b06

* Install suggested plugins
* Instalar los siguientes plugins

Plugins

[Ant Plugin](https://plugins.jenkins.io/ant)

[Apache HttpComponents Client 4.x API Plugin](https://plugins.jenkins.io/apache-httpcomponents-client-4-api)

[Authentication Tokens API Plugin](https://plugins.jenkins.io/authentication-tokens)

[Azure Commons Plugin](https://plugins.jenkins.io/azure-commons)

[bouncycastle API Plugin](https://plugins.jenkins.io/bouncycastle-api)

[Branch API Plugin](https://plugins.jenkins.io/branch-api)

[Build Monitor View](https://plugins.jenkins.io/build-monitor-plugin)

[Build Pipeline Plugin](https://plugins.jenkins.io/build-pipeline-plugin)

[Build Timeout](https://plugins.jenkins.io/build-timeout)

[CloudBees Credentials Plugin](https://plugins.jenkins.io/cloudbees-credentials)

[CloudBees Docker Build and Publish plugin](https://plugins.jenkins.io/docker-build-publish)

[Command Agent Launcher Plugin](https://plugins.jenkins.io/command-launcher)

[Conditional BuildStep](https://plugins.jenkins.io/conditional-buildstep)

[Config File Provider Plugin](https://plugins.jenkins.io/config-file-provider)

[Credentials Binding Plugin](https://plugins.jenkins.io/credentials-binding)

[Credentials Plugin](https://plugins.jenkins.io/credentials)

[Delivery Pipeline Plugin](https://plugins.jenkins.io/delivery-pipeline-plugin)

[Deployment Dashboard Plugin for Jenkins](https://plugins.jenkins.io/ec2-deployment-dashboard)

[Display URL API](https://plugins.jenkins.io/display-url-api)

[Docker Commons Plugin](https://plugins.jenkins.io/docker-commons)

[Docker Pipeline](https://plugins.jenkins.io/docker-workflow)

[Durable Task Plugin](https://plugins.jenkins.io/durable-task)

[Email Extension Plugin](https://plugins.jenkins.io/email-ext)

[Environment Dashboard Plugin](https://plugins.jenkins.io/environment-dashboard)

[Folders Plugin](https://plugins.jenkins.io/cloudbees-folder)

[Git client plugin](https://plugins.jenkins.io/git-client)

[Git plugin](https://plugins.jenkins.io/git)

[GIT server Plugin](https://plugins.jenkins.io/git-server)

[GitHub API Plugin](https://plugins.jenkins.io/github-api)

[GitHub Branch Source Plugin](https://plugins.jenkins.io/github-branch-source)

[GitHub plugin](https://plugins.jenkins.io/github)

[Google OAuth Credentials plugin](https://plugins.jenkins.io/google-oauth-plugin)

[Gradle Plugin](https://plugins.jenkins.io/gradle)

[Jackson 2 API Plugin](https://plugins.jenkins.io/jackson2-api)

[Javadoc Plugin](https://plugins.jenkins.io/javadoc)

[JavaScript GUI Lib: ACE Editor bundle plugin](https://plugins.jenkins.io/ace-editor)

[JavaScript GUI Lib: Handlebars bundle plugin](https://plugins.jenkins.io/handlebars)

[JavaScript GUI Lib: jQuery bundles (jQuery and jQuery UI) plugin](https://plugins.jenkins.io/jquery-detached)

[JavaScript GUI Lib: Moment.js bundle plugin](https://plugins.jenkins.io/momentjs)

[Job DSL](https://plugins.jenkins.io/job-dsl)

[jQuery plugin](https://plugins.jenkins.io/jquery)

[JSch dependency plugin](https://plugins.jenkins.io/jsch)

[JUnit Plugin](https://plugins.jenkins.io/junit)

[Kubernetes Cli Plugin](https://plugins.jenkins.io/kubernetes-cli)

[Kubernetes Client API Plugin](https://plugins.jenkins.io/kubernetes-client-api)

[Kubernetes Continuous Deploy Plugin](https://plugins.jenkins.io/kubernetes-cd)

[Kubernetes Credentials Plugin](https://plugins.jenkins.io/kubernetes-credentials)

[Kubernetes Credentials Provider](https://plugins.jenkins.io/kubernetes-credentials-provider)

[LDAP Plugin](https://plugins.jenkins.io/ldap)

[Locale plugin](https://plugins.jenkins.io/locale)

[Lockable Resources plugin](https://plugins.jenkins.io/lockable-resources)

[Mailer Plugin](https://plugins.jenkins.io/mailer)

[MapDB API Plugin](https://plugins.jenkins.io/mapdb-api)

[Matrix Authorization Strategy Plugin](https://plugins.jenkins.io/matrix-auth)

[Matrix Project Plugin](https://plugins.jenkins.io/matrix-project)

[Maven Integration plugin](https://plugins.jenkins.io/maven-plugin)

[NodeJS Plugin](https://plugins.jenkins.io/nodejs)

[OAuth Credentials plugin](https://plugins.jenkins.io/oauth-credentials)

[Oracle Java SE Development Kit Installer Plugin](https://plugins.jenkins.io/jdk-tool)

[OWASP Markup Formatter Plugin](https://plugins.jenkins.io/antisamy-markup-formatter)

Uses the [OWASP Java HTML Sanitizer](https://www.owasp.org/index.php/OWASP_Java_HTML_Sanitizer_Project)

[PAM Authentication plugin](https://plugins.jenkins.io/pam-auth)

[Parameterized Trigger plugin](https://plugins.jenkins.io/parameterized-trigger)

[Pipeline](https://plugins.jenkins.io/workflow-aggregator)

[Pipeline Graph Analysis Plugin](https://plugins.jenkins.io/pipeline-graph-analysis)

[Pipeline: API](https://plugins.jenkins.io/workflow-api)

[Pipeline: Basic Steps](https://plugins.jenkins.io/workflow-basic-steps)

[Pipeline: Build Step](https://plugins.jenkins.io/pipeline-build-step)

[Pipeline: Declarative](https://plugins.jenkins.io/pipeline-model-definition)

[Pipeline: Declarative Agent API](https://plugins.jenkins.io/pipeline-model-declarative-agent)

[Pipeline: Declarative Extension Points API](https://plugins.jenkins.io/pipeline-model-extensions)

[Pipeline: GitHub Groovy Libraries](https://plugins.jenkins.io/pipeline-github-lib)

[Pipeline: Groovy](https://plugins.jenkins.io/workflow-cps)

[Pipeline: Input Step](https://plugins.jenkins.io/pipeline-input-step)

Adds the Pipeline step input to wait for human input or approval.

[Pipeline: Job](https://plugins.jenkins.io/workflow-job)

[Pipeline: Milestone Step](https://plugins.jenkins.io/pipeline-milestone-step)

[Pipeline: Model API](https://plugins.jenkins.io/pipeline-model-api)

[Pipeline: Multibranch](https://plugins.jenkins.io/workflow-multibranch)

[Pipeline: Nodes and Processes](https://plugins.jenkins.io/workflow-durable-task-step)

[Pipeline: REST API Plugin](https://plugins.jenkins.io/pipeline-rest-api)

[Pipeline: SCM Step](https://plugins.jenkins.io/workflow-scm-step)

[Pipeline: Shared Groovy Libraries](https://plugins.jenkins.io/workflow-cps-global-lib)

[Pipeline: Stage Step](https://plugins.jenkins.io/pipeline-stage-step)

[Pipeline: Stage Tags Metadata](https://plugins.jenkins.io/pipeline-stage-tags-metadata)

[Pipeline: Stage View Plugin](https://plugins.jenkins.io/pipeline-stage-view)

[Pipeline: Step API](https://plugins.jenkins.io/workflow-step-api)

[Pipeline: Supporting APIs](https://plugins.jenkins.io/workflow-support)

[Plain Credentials Plugin](https://plugins.jenkins.io/plain-credentials)

[Resource Disposer Plugin](https://plugins.jenkins.io/resource-disposer)

[Run Condition Plugin](https://plugins.jenkins.io/run-condition)

[SCM API Plugin](https://plugins.jenkins.io/scm-api)

[Script Security Plugin](https://plugins.jenkins.io/script-security)

[SSH Credentials Plugin](https://plugins.jenkins.io/ssh-credentials)

[SSH Slaves plugin](https://plugins.jenkins.io/ssh-slaves)

[Structs Plugin](https://plugins.jenkins.io/structs)

[Subversion Plug-in](https://plugins.jenkins.io/subversion)

[ThinBackup](https://plugins.jenkins.io/thinBackup)

[Timestamper](https://plugins.jenkins.io/timestamper)

[Token Macro Plugin](https://plugins.jenkins.io/token-macro)

[Trilead API Plugin](https://plugins.jenkins.io/trilead-api)

[Variant Plugin](https://plugins.jenkins.io/variant)

[WMI Windows Agents Plugin](https://plugins.jenkins.io/windows-slaves)

[Workspace Cleanup Plugin](https://plugins.jenkins.io/ws-cleanup)

<http://mx.com.smi.services:30301/restart>

en global tool configuration

add nodejs, last version

Configure locale a en\_US

Check box, ignore browser preferences

Restart

Add credential item to Jenkins

Name: **docker-hub-credentials**

to connect to github

create pod to Nexus

kubectl apply -f .\nexus-a-deployment.yaml

nexus

set permissions

#https://blog.sonatype.com/kubernetes-recipe-sonatype-nexus-3-as-a-private-docker-registry

#on minikube ssh

#sudo chmod -R 777 /data/nexus\_home

Crea secret

kubectl create secret docker-registry pullsecret --docker-server=mx.com.smi.services:30402 --docker-username=admin --docker-password=admin --docker-email=erdnando@gmail.com

Referencia: <https://blog.sonatype.com/kubernetes-recipe-sonatype-nexus-3-as-a-private-docker-registry>

Se agrega en los specs yml:

imagePullSecrets:

- name: pullsecret

Configure Jenkins jobs

Create folder front-fintech

Create job:

[src-front-fintech-vue](http://mx.com.smi.services:30301/job/front-fintech/job/src-front-fintech-vue/)

Detecta cambios sobre el proyecto versionado e inicia el proceso

source code management

git

<https://github.com/erdnando/afiliacion2.0.git>

Poll SCM

\* \* \* \* \*

[ci-front-fintech-vue](http://mx.com.smi.services:30301/job/front-fintech/job/ci-front-fintech-vue/) (es pipeline)

Ejecuta script en <https://github.com/erdnando/fintech-ci-cd/Jenkinsfile-front-fintech-vue>, ste script en git, obtiene dentro de docker-hub, realizas los stage de build y push sobre docker hub, dejando una imagen actualizada y lista para el deployment

build after other

src-front-fintech-vue

Pipeline

Pipeline script from SCM

SCM: Git

Repository url: <https://github.com/erdnando/fintech-ci-cd.git>

Script path: Jenkinsfile-front-fintech-vue

[cd-front-fintech-vue](http://mx.com.smi.services:30301/job/front-fintech/job/cd-front-fintech-vue/)

Ejecuta los scripts de despliegue a través de la API de kubernetes local (minikube) via Curl

- borra los Pods de servicio de front-end del kubernetes local

- borra el Pod de balancer de front-end del kubernetes local

- recrea los Pods de servicio de front-end del kubernetes local

- recrea el Pod de balancer de front-end del kubernetes local

**build after other**

ci-front-fintech-vue

curl -v --cacert /var/run/secrets/kubernetes.io/serviceaccount/ca.crt \

-H "Authorization: Bearer $(cat /var/run/secrets/kubernetes.io/serviceaccount/token)" \

--request DELETE \

--url https://kubernetes.default.svc/apis/apps/v1/namespaces/default/deployments/front-a \

--header 'content-type: application/json'

curl -v --cacert /var/run/secrets/kubernetes.io/serviceaccount/ca.crt \

-H "Authorization: Bearer $(cat /var/run/secrets/kubernetes.io/serviceaccount/token)" \

--request DELETE \

--url https://kubernetes.default.svc/api/v1/namespaces/default/services/front-lb-a \

--header 'content-type: application/json'

curl -v --cacert /var/run/secrets/kubernetes.io/serviceaccount/ca.crt \

-H "Authorization: Bearer $(cat /var/run/secrets/kubernetes.io/serviceaccount/token)" \

--request POST \

--url https://kubernetes.default.svc/apis/apps/v1/namespaces/default/deployments \

--header 'content-type: application/json' \

--data '{

"apiVersion":"apps/v1",

"kind":"Deployment",

"metadata":{

"name":"front-a",

"labels":{

"app":"front-a"

}

},

"spec": {

"replicas" : 2,

"selector": {

"matchLabels" : {

"app":"front-a"

}

},

"template" : {

"metadata" : {

"labels" : {

"app":"front-a"

}

},

"spec":{

"imagePullSecrets":[

{

"name": "pullsecret"

}

],

"containers":[

{

"name":"front-a",

"image":"mx.com.smi.services:30402/front-fintech:latest",

"ports":[

{

"containerPort": 80

}

]

}

]

}

}

}

}'

curl -v --cacert /var/run/secrets/kubernetes.io/serviceaccount/ca.crt \

-H "Authorization: Bearer $(cat /var/run/secrets/kubernetes.io/serviceaccount/token)" \

--request POST \

--url https://kubernetes.default.svc/api/v1/namespaces/default/services \

--header 'content-type: application/json' \

--data '{

"kind":"Service",

"apiVersion":"v1",

"metadata":{

"name":"front-lb-a",

"namespace":"default",

"selfLink":"/api/v1/namespaces/default/services/front-lb-a",

"labels":{

"app":"front-lb-a"

}

},

"spec":{

"ports":[

{

"protocol":"TCP",

"port":80,

"targetPort":80,

"nodePort":30001

}

],

"selector":{

"app":"front-a"

},

"clusterIP":"10.96.61.18",

"type":"LoadBalancer",

"sessionAffinity":"None",

"externalTrafficPolicy":"Cluster"

},

"status":{

"loadBalancer":{}

}

}'