Minikube Setup

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Revision History

Revision	Date	Author(s)	Description
1.1	17/08/22	HZ	correction for submodule update
1.2	17/08/22	HZ	to do list with known issues

Contents

1 Introduction

This document describes how to test the deployment locally via Minikube.

2 Requirements

Ubuntu 20.04.4 LTS

3 Installation

3.1 Install Docker

```
sudo apt-get update

sudo apt-get install \
    ca-certificates \
    curl \
    gnupg \
    lsb-release

sudo mkdir -p /etc/apt/keyrings

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg

echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.gpg] https://download.docker.com/linux/ubuntu \
  $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

sudo apt-get update

sudo apt-get install docker-ce docker-ce-cli containerd.io docker-compose-plugin
```

3.2 Install Minikube

```
curl -Lo minikube https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64 \
  && chmod +x minikube

sudo cp minikube /usr/local/bin && rm minikube
```

3.3 Install Kubectl

```
sudo curl -fsSLo /usr/share/keyrings/kubernetes-archive-keyring.gpg https://packages.cloud.google.com/apt/doc/apt-key.gpg

echo "deb [signed-by=/usr/share/keyrings/kubernetes-archive-keyring.gpg] https://apt.kubernetes.io/ kubernetes-xenial main" | sudo tee
    /etc/apt/sources.list.d/kubernetes.list

sudo apt-get update

sudo apt-get install -y kubectl
```

3.4 Install some required tools

```
sudo apt install default-jdk
sudo apt install make
sudo apt install jq
```

3.5 Post-installation steps

```
sudo usermod -aG docker $USER && newgrp docker
```

3.6 Clone the project repository

```
git clone https://tickets.teuto.net/4teuto/cust/9187/comm/backend/tineon-kube-deploy.git
cd tineon-kube-deploy
git submodule update --init --recursive
```

4 Run the deployment script

```
./install.sh
```

The initial installation takes a few minutes. You can watch the progress via:

```
kubectl get pods
```

You can rerun the script after any change is made.
To dump the log of a container use:

```
kubectl logs my-pod
```

5 Usage at a glance

The following services are available now:

5.1 Adminer

https://db.test/

5.1.1 Credentials

Server: mysql
Username: root
Password: tineondb
Database: tineon

5.2 Keycloak

https://keycloak.test/

5.2.1 Credentials

Username: admin
Password: admin

> The configuration for the CRM API is missing. It needs to be configured by using the Keycloak operator via JSON.

> The connection from the club administration software (to create new users) still points to the old Keycloak server at AWS.

5.3 OpenSearch

https://search.test/

> OpenSearch is not connected to the backend. The configuration still points to Elasticsearch on AWS.

5.3.1 Credentials

Username: admin
Password: admin

5.4 MailHog

https://smtp.test/

5.5 MinIO

minio.test

> MinIO is not connected to the backend. The configuration still points to S3 on AWS.

5.6 MinIO Console

https://minio-console.test/

5.6.1 Credentials

The Credentials are logged while executing the install.sh script. Example:
Minio root user 4bETjPnRmYMyyOn2Qwf8 has password m500x3bcU5O07nAHX9ZfVrfPhDCVgnNwE5tRh4do

5.6.2   Credentials

5.7   Backend

https://backend.test/

5.8   Frontend

https://frontend.test/

5.8.1   Credentials

Username: helge
Password: secret

5.9   SSH tunnel

Create an SSH tunnel to access the services from outside. Sample:

```
sudo ssh -L 443:192.168.49.2:443 ubuntu@212.15.212.50
```

You can find the first IP in the /etc/hosts file of the Ubuntu instance:

```
192.168.49.2 db.test keycloak.test search.test smtp.test minio.test minio-console.test backend.test frontend.test
```

Edit the /etc/hosts file on your machine like this:

```
127.0.0.1 db.test keycloak.test search.test smtp.test minio.test minio-console.test backend.test frontend.test
```

Todo list