Kubeflow local setup

Kubeflow is an open-source machine learning toolkit on top of kubernetes. It is a little difficult to install it locally and get the complete toolkit features in hand, but Arrikto has made it quite easy to install it in few simple steps.

In this guide the detailed process is explained and is done using arrikto's minikf.

Minikf is a combination of Minikube (kubernetes), Kubeflow and ROK (snapshot management system).

Visit Vagrant box arrikto/minikf - Vagrant Cloud (vagrantup.com) for more information.

Installation procedure:

Install vagrant – for windows

Install | Vagrant | HashiCorp Developer

Go to the Windows tab, and install the AMD64 binary.

Install Virtual box – for windows

Downloads - Oracle VM VirtualBox

Install Windows host 7.0.4 or latest.

Terminal commands

Open a terminal on your laptop, create a new directory:

mkdir NameForYourDirectory

Switch into it:

cd NameForYourDirectory

And run the following 2 commands to install MiniKF:

vagrant init Arrikto/minikf

vagrant up

PURPOSE AND EFFECT

1) vagrant init arrikto/minikf

This command will create a vagrant file into your newly created directory.

Into that Vagrant file, find the *config.vm.box* command and instead of just: **config.vm.box** = "arrikto/minikf"

add:

config.vm.box = "arrikto/minikf"

config.vm.box_version = "20210428.0.1"

config.vm.box_url = "https://vagrantcloud.com/arrikto/minikf"

Save the file and close it.

2) vagrant up

This command will get your local machine started; you will see you kubeflow central dashboard to get started. Rerun the *vagrant up* command when it is asked to do on the command prompt.

Note: It will take a lot of time if your internet speed is less than 10mbs/sec.

Save the user and password displayed on the screen during installation for later use.