Log of installation of Tanzu Community Edition on Linux Ubuntu 18.04 (running on WSL2):

It may be helpful to install brew:

https://brew.sh/

/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

Tanzu Community Edition (tce) installation instructions to follow:

https://tanzucommunityedition.io/docs/latest/cli-installation/

Note that you should record the following during the installation:

Tenant ID

(tce) Application ID

(Cloud) Subscription ID

Secret ID (tce application secret)

Install docker and kubectl as per the instructions, use minikube to test kubectl locally:

[sudo] password for jcf:

  * Starting Docker: docker
jcf@DESKTOP-BM1PVKK:~$ ls

Test b.jpg dcn-hw2 kubectl minikube-linux-amd64 test

a.jpg datadir jc-a.jpg kubectl.sha256 nyu-cs2262-001-fa20 test1.c

jcf@DESKTOP-BM1PVKK:~$ kubectl cluster-info

To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.

The connection to the server localhost:8080 was refused - did you specify the right host or port?

jcf@DESKTOP-BM1PVKK:~$ kubectl version --client

Client Version: version.Info{Major:"1", Minor:"23", GitVersion:"v1.23.3", GitCommit:"816c97ab8cff8a1c72eccca1026f7820e93e0d25", GitTreeState:"clean", BuildDate:"2022-01-25T21:25:17Z", GoVersion:"go1.17.6", Compiler:"gc", Platform:"linux/amd64"}

jcf@DESKTOP-BM1PVKK:~$ minikube start

😄 minikube v1.25.1 on Ubuntu 20.04

✨ Automatically selected the docker driver. Other choices: none, ssh

👍 Starting control plane node minikube in cluster minikube

🚜 Pulling base image ...

🔥 Creating docker container (CPUs=2, Memory=3100MB) ...

🐳 Preparing Kubernetes v1.23.1 on Docker 20.10.12 ...

- kubelet.housekeeping-interval=5m
- Generating certificates and keys ...
- Booting up control plane ...
- Configuring RBAC rules ...

🔎 Verifying Kubernetes components...

- Using image gcr.io/k8s-minikube/storage-provisioner:v5

🌟 Enabled addons: default-storageclass, storage-provisioner

🏄 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default

jcf@DESKTOP-BM1PVKK:~$ kubectl version --client

Client Version: version.Info{Major:"1", Minor:"23", GitVersion:"v1.23.3", GitCommit:"816c97ab8cff8a1c72eccca1026f7820e93e0d25", GitTreeState:"clean", BuildDate:"2022-01-25T21:25:17Z", GoVersion:"go1.17.6", Compiler:"gc", Platform:"linux/amd64"}

jcf@DESKTOP-BM1PVKK:~$ kubectl cluster-info

Kubernetes control plane is running at https://127.0.0.1:49159

CoreDNS is running at https://127.0.0.1:49159/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy

To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.

jcf@DESKTOP-BM1PVKK:~$ docker info | grep -i cgroup

 Cgroup Driver: cgroupfs

 Cgroup Version: 1

WARNING: No blkio throttle.read_bps_device support

WARNING: No blkio throttle.write_bps_device support

WARNING: No blkio throttle.read_iops_device support

WARNING: No blkio throttle.write_iops_device support

Install Tanzu Community Edition as per the instructions (note: some steps may deviate from the instructions but in general, the installation instructions were followed):

jcf@DESKTOP-BM1PVKK:~$ brew install vmware-tanzu/tanzu/tanzu-community-edition

Running `brew update --preinstall`...

==> Homebrew is run entirely by unpaid volunteers. Please consider donating:

  https://github.com/Homebrew/brew#donations

==> Auto-updated Homebrew!

Updated 1 tap (homebrew/core).

==> Updated Formulae

Updated 1 formula.

==> Tapping vmware-tanzu/tanzu

Cloning into '/home/linuxbrew/.linuxbrew/Homebrew/Library/Taps/vmware-tanzu/homebrew-tanzu'...

remote: Enumerating objects: 89, done.

remote: Counting objects: 100% (89/89), done.

remote: Compressing objects: 100% (72/72), done.

remote: Total 89 (delta 37), reused 43 (delta 13), pack-reused 0

Unpacking objects: 100% (89/89), 29.36 KiB | 567.00 KiB/s, done.

Tapped 1 formula (114 files, 468.8KB).

==> Downloading https://github.com/vmware-tanzu/community-edition/releases/download/v0.9.1/tce-linux-amd64-v0.9.1.t

==> Downloading from https://objects.githubusercontent.com/github-production-release-asset-2e65be/303802332/e8ec899

100.0%

==> Installing tanzu-community-edition from vmware-tanzu/tanzu

==> Thanks for installing Tanzu Community Edition!

==> The Tanzu CLI has been installed on your system

==>

==> **

==> * To initialize all plugins required by Tanzu Community Edition, an additional

==> * step is required. To complete the installation, please run the following

==> * shell script:

==> *

==> * /home/linuxbrew/.linuxbrew/Cellar/tanzu-community-edition/v0.9.1/libexec/configure-tce.sh

==> *

==> **

==>

==> * To cleanup and remove Tanzu Community Edition from your system, run the

==> * following script:

==> /home/linuxbrew/.linuxbrew/Cellar/tanzu-community-edition/v0.9.1/libexec/uninstall.sh

==>

🍺 /home/linuxbrew/.linuxbrew/Cellar/tanzu-community-edition/v0.9.1: 15 files, 572.5MB, built in 12 seconds

==> Running `brew cleanup tanzu-community-edition`...

Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.

Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).

jcf@DESKTOP-BM1PVKK:~$ /home/linuxbrew/.linuxbrew/Cellar/tanzu-community-edition/v0.9.1/libexec/configure-tce.sh

MY_DIR: /home/linuxbrew/.linuxbrew/Cellar/tanzu-community-edition/v0.9.1/libexec

/home/jcf/.local/share

Removing old plugin cache from /home/jcf/.cache/tanzu/catalog.yaml

Making a backup of your Kubernetes config files into /tmp

| initializing ✓ successfully initialized CLI

Installation complete!

jcf@DESKTOP-BM1PVKK:~$ curl -H "Accept: application/vnd.github.v3.raw" -L https://api.github.com/repos/vmware-tanzu/community-edition/contents/hack/get-tce-release.sh | bash -s v0.9.1 linux

```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  2096  100  2096    0     0  12402      0 --:--:-- --:--:-- --:--:-- 12402
```

Validating dependencies ...

curl is /usr/bin/curl

grep is /usr/bin/grep

sed is /usr/bin/sed

tr is /usr/bin/tr

bash: line 23: type: jq: not found

jcf@DESKTOP-BM1PVKK:~$ ls

Test b.jpg dcn-hw2 kubectl minikube-linux-amd64 test

a.jpg datadir jc-a.jpg kubectl.sha256 nyu-cs2262-001-fa20 test1.c

jcf@DESKTOP-BM1PVKK:~$ cd mnt/c

-bash: cd: mnt/c: No such file or directory

jcf@DESKTOP-BM1PVKK:~$ cd /mnt/c

jcf@DESKTOP-BM1PVKK:/mnt/c$ cd users/admin

jcf@DESKTOP-BM1PVKK:/mnt/c/users/admin$ cd Downloads

jcf@DESKTOP-BM1PVKK:/mnt/c/users/admin/Downloads$ ls

jcf@DESKTOP-BM1PVKK:/mnt/c/users/admin/Downloads$ cp tce-linux-amd64-v0.9.1.tar.gz ~

jcf@DESKTOP-BM1PVKK:/mnt/c/users/admin/Downloads$ cd ~

jcf@DESKTOP-BM1PVKK:~$ ls

Test b.jpg dcn-hw2 kubectl minikube-linux-amd64 tce-linux-amd64-v0.9.1.tar.gz test1.c

a.jpg datadir jc-a.jpg kubectl.sha256 nyu-cs2262-001-fa20 test

jcf@DESKTOP-BM1PVKK:~$ tar xzvf tce-linux-amd64-v0.9.1.tar.gz

tce-linux-amd64-v0.9.1/

tce-linux-amd64-v0.9.1/bin/

tce-linux-amd64-v0.9.1/bin/tanzu

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-cluster

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-kubernetes-release

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-login

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-package

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-pinniped-auth

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-management-cluster

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-builder

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-standalone-cluster

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-conformance

tce-linux-amd64-v0.9.1/bin/tanzu-plugin-diagnostics

tce-linux-amd64-v0.9.1/install.sh

tce-linux-amd64-v0.9.1/uninstall.sh

jcf@DESKTOP-BM1PVKK:~$ cd tce*

-bash: cd: too many arguments

jcf@DESKTOP-BM1PVKK:~$ ls

Test b.jpg dcn-hw2 kubectl minikube-linux-amd64 tce-linux-amd64-v0.9.1 test

a.jpg datadir jc-a.jpg kubectl.sha256 nyu-cs2262-001-fa20 tce-linux-amd64-v0.9.1.tar.gz test1.c

jcf@DESKTOP-BM1PVKK:~$ cd tce*9.1

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ ls

bin install.sh uninstall.sh

```
jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ ./install.sh
+ ALLOW_INSTALL_AS_ROOT=
+ [[ 1000 -eq 0 ]]
+++ dirname ./install.sh
++ cd .
++ pwd
+ MY_DIR=/home/jcf/tce-linux-amd64-v0.9.1
++ uname
+ BUILD_OS=Linux
+ case "${BUILD_OS}" in
+ XDG_DATA_HOME=/home/jcf/.local/share
+ echo /home/jcf/.local/share
/home/jcf/.local/share
++ command -v tanzu
+ TANZU_BIN_PATH=/home/linuxbrew/.linuxbrew/bin/tanzu
+ [[ -n /home/linuxbrew/.linuxbrew/bin/tanzu ]]
+ sudo rm -f /home/linuxbrew/.linuxbrew/bin/tanzu
[sudo] password for jcf:
+ TANZU_BIN_PATH=/usr/local/bin
+ [[
:/home/linuxbrew/.linuxbrew/bin:/home/linuxbrew/.linuxbrew/sbin:/usr/local/sbin:/usr/local/bin:/usr/
sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/usr/lib/wsl/lib:/mnt/c/Program Files
(x86)/Windows Resource Kits/Tools/:/mnt/c/Program Files (x86)/Common Files/Intel/Shared
Libraries/redist/intel64/compiler:/mnt/c/Program Files (x86)/Microsoft
SDKs/Azure/CLI2/wbin:/mnt/c/Borland/CaliberRMServer/Bin:/mnt/c/Borland/CaliberRMServer/Versant
/8_0_2/NT/Bin:/mnt/c/Borland/CaliberRMServer/Lib:/mnt/c/Program Files/Borland/Caliber
Visualize/bin:/mnt/c/WINDOWS/system32:/mnt/c/WINDOWS:/mnt/c/WINDOWS/System32/Wbem:/m
nt/c/WINDOWS/System32/WindowsPowerShell/v1.0/:/mnt/c/Program Files
(x86)/PuTTY/:/mnt/c/Python27/:/mnt/c/Program Files/Java/jdk1.7.0_80/bin:/mnt/c/Program
Files/apache-ant/bin:/mnt/c/ProgramData/Oracle/Java/javapath:/mnt/c/Python27/Scripts:/mnt/c/Prog
ram Files (x86)/MySQL/MySQL Fabric 1.5 & MySQL Utilities 1.5/:/mnt/c/Program Files
(x86)/MySQL/MySQL Fabric 1.5 & MySQL Utilities 1.5/Doctrine extensions for PHP/:/mnt/c/Program
Files/apache-maven/bin:/mnt/c/Program Files/Borland/Caliber Visualize/lib:/mnt/c/Program Files
(x86)/Skype/Phone/:/mnt/c/WINDOWS/System32/OpenSSH/:/mnt/c/Program
```

Files/Git/cmd:/mnt/c/Program Files/Docker/Docker/resources/bin:/mnt/c/ProgramData/DockerDesktop/version-bin:/mnt/c/Users/admin/AppData/Local/Programs/Python/Launcher/:/mnt/c/Users/admin/AppData/Local/Programs/Python/Python37/Scripts/:/mnt/c/Users/admin/AppData/Local/Programs/Python/Python37/:/mnt/c/Program Files/Docker Toolbox:/mnt/c/Users/admin/AppData/Local/Microsoft/WindowsApps:/mnt/c/MinGW/mingw64/bin:/mnt/c/Users/admin/AppData/Local/GitHubDesktop/bin:/mnt/c/Users/admin/AppData/Local/Programs/Microsoft VS Code/bin:/snap/bin: == *\:\/\h\o\m\e\/\j\c\f\/\b\i\n\:*]]

+ echo Installing tanzu cli to /usr/local/bin

Installing tanzu cli to /usr/local/bin

+ sudo install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu /usr/local/bin

+ mkdir -p /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-builder /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-cluster /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-conformance /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-diagnostics /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-kubernetes-release /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-login /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-management-cluster /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-package /home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

```
+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-pinniped-auth
/home/jcf/.local/share/tanzu-cli

+ for plugin in "${MY_DIR}"/bin/tanzu-plugin*

+ install /home/jcf/tce-linux-amd64-v0.9.1/bin/tanzu-plugin-standalone-cluster
/home/jcf/.local/share/tanzu-cli

+ mkdir -p /home/jcf/.local/share/tce

+ install /home/jcf/tce-linux-amd64-v0.9.1/uninstall.sh /home/jcf/.local/share/tce

+ TANZU_PLUGIN_CACHE=/home/jcf/.cache/tanzu/catalog.yaml

+ [[ -n /home/jcf/.cache/tanzu/catalog.yaml ]]

+ echo 'Removing old plugin cache from /home/jcf/.cache/tanzu/catalog.yaml'

Removing old plugin cache from /home/jcf/.cache/tanzu/catalog.yaml

+ rm -f /home/jcf/.cache/tanzu/catalog.yaml

+ tanzu init

| initializing ✓    successfully initialized CLI

++ tanzu plugin repo list

++ grep tce

+ TCE_REPO=

+ [[ -z '' ]]

+ tanzu plugin repo add --name tce --gcp-bucket-name tce-tanzu-cli-plugins --gcp-root-path artifacts

++ tanzu plugin repo list

++ grep core-admin

+ TCE_REPO=

+ [[ -z '' ]]

+ tanzu plugin repo add --name core-admin --gcp-bucket-name tce-tanzu-cli-framework-admin
--gcp-root-path artifacts-admin

+ echo 'Installation complete!'

Installation complete!

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ curl -LO
https://dl.k8s.io/release/v1.20.1/bin/linux/amd64/kubectl
```

```
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   154  100   154    0     0    956      0 --:--:-- --:--:-- --:--:--   956
100 38.3M  100 38.3M    0     0  19.3M      0  0:00:01  0:00:01 --:--:-- 23.9M
```

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ curl -sL https://aka.ms/InstallAzureCLIDeb | sudo bash

Hit:1 https://download.docker.com/linux/ubuntu focal InRelease

Get:2 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]

Hit:4 https://packages.microsoft.com/repos/azure-cli focal InRelease

Get:5 https://packages.microsoft.com/repos/microsoft-ubuntu-bionic-prod bionic InRelease [4002 B]

Hit:6 http://archive.ubuntu.com/ubuntu focal InRelease

Get:3 https://packages.cloud.google.com/apt kubernetes-xenial InRelease [9383 B]

Get:7 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]

Get:8 <http://security.ubuntu.com/ubuntu focal-security/main> amd64 Packages [1210 kB]

Get:9 <http://security.ubuntu.com/ubuntu focal-security/main> Translation-en [213 kB]

Get:10 <http://security.ubuntu.com/ubuntu focal-security/main> amd64 c-n-f Metadata [9136 B]

Get:11 <http://security.ubuntu.com/ubuntu focal-security/restricted> amd64 Packages [718 kB]

Get:12 <http://security.ubuntu.com/ubuntu focal-security/restricted> Translation-en [103 kB]

Get:13 <http://security.ubuntu.com/ubuntu focal-security/universe> amd64 Packages [676 kB]

Get:14 http://archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]

Get:15 <http://security.ubuntu.com/ubuntu focal-security/universe> amd64 c-n-f Metadata [13.0 kB]

Get:16 <https://packages.microsoft.com/repos/microsoft-ubuntu-bionic-prod bionic/main> amd64 Packages [233 kB]

Get:17 <https://packages.cloud.google.com/apt kubernetes-xenial/main> amd64 Packages [53.6 kB]

Get:18 <http://archive.ubuntu.com/ubuntu focal-updates/main> amd64 Packages [1550 kB]

Get:19 <http://archive.ubuntu.com/ubuntu focal-updates/main> Translation-en [300 kB]

Get:20 <http://archive.ubuntu.com/ubuntu focal-updates/main> amd64 c-n-f Metadata [14.7 kB]

Get:21 <http://archive.ubuntu.com/ubuntu focal-updates/restricted> amd64 Packages [775 kB]

Get:22 <http://archive.ubuntu.com/ubuntu focal-updates/restricted> Translation-en [111 kB]

Get:23 <http://archive.ubuntu.com/ubuntu focal-updates/universe> amd64 Packages [896 kB]

Get:24 <http://archive.ubuntu.com/ubuntu focal-updates/universe> Translation-en [197 kB]

Get:25 <http://archive.ubuntu.com/ubuntu focal-updates/universe> amd64 c-n-f Metadata [20.0 kB]

Get:26 <http://archive.ubuntu.com/ubuntu focal-backports/universe> amd64 Packages [20.8 kB]

Get:27 <http://archive.ubuntu.com/ubuntu focal-backports/universe> Translation-en [14.3 kB]

Get:28 <http://archive.ubuntu.com/ubuntu focal-backports/universe> amd64 c-n-f Metadata [692 B]

Fetched 7477 kB in 6s (1285 kB/s)

Reading package lists... Done

Reading package lists... Done

Building dependency tree

Reading state information... Done

lsb-release is already the newest version (11.1.0ubuntu2).

lsb-release set to manually installed.

gnupg is already the newest version (2.2.19-3ubuntu2.1).

gnupg set to manually installed.

The following additional packages will be installed:

libcurl4

The following packages will be upgraded:

apt-transport-https curl libcurl4

3 upgraded, 0 newly installed, 0 to remove and 125 not upgraded.

Need to get 400 kB of archives.

After this operation, 3072 B of additional disk space will be used.

Get:1 <http://archive.ubuntu.com/ubuntu focal-updates/universe> amd64 apt-transport-https all 2.0.6 [4680 B]

Get:2 <http://archive.ubuntu.com/ubuntu focal-updates/main> amd64 curl amd64 7.68.0-1ubuntu2.7 [161 kB]

Get:3 <http://archive.ubuntu.com/ubuntu focal-updates/main> amd64 libcurl4 amd64 7.68.0-1ubuntu2.7 [234 kB]

Fetched 400 kB in 1s (355 kB/s)

(Reading database ... 90013 files and directories currently installed.)

Preparing to unpack .../apt-transport-https_2.0.6_all.deb ...

Unpacking apt-transport-https (2.0.6) over (2.0.5) ...

Preparing to unpack .../curl_7.68.0-1ubuntu2.7_amd64.deb ...

Unpacking curl (7.68.0-1ubuntu2.7) over (7.68.0-1ubuntu2.5) ...

Preparing to unpack .../libcurl4_7.68.0-1ubuntu2.7_amd64.deb ...

Unpacking libcurl4:amd64 (7.68.0-1ubuntu2.7) over (7.68.0-1ubuntu2.5) ...

Setting up apt-transport-https (2.0.6) ...

Setting up libcurl4:amd64 (7.68.0-1ubuntu2.7) ...

Setting up curl (7.68.0-1ubuntu2.7) ...

Processing triggers for man-db (2.9.1-1) ...

Processing triggers for libc-bin (2.31-0ubuntu9.2) ...

Hit:1 http://security.ubuntu.com/ubuntu focal-security InRelease

Hit:2 https://download.docker.com/linux/ubuntu focal InRelease

Hit:4 http://archive.ubuntu.com/ubuntu focal InRelease

Hit:5 http://archive.ubuntu.com/ubuntu focal-updates InRelease

Hit:6 https://packages.microsoft.com/repos/azure-cli focal InRelease

Hit:7 https://packages.microsoft.com/repos/microsoft-ubuntu-bionic-prod bionic InRelease

Hit:8 http://archive.ubuntu.com/ubuntu focal-backports InRelease

Get:3 https://packages.cloud.google.com/apt kubernetes-xenial InRelease [9383 B]

Fetched 9383 B in 3s (2869 B/s)

Reading package lists... Done

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following packages will be upgraded:

azure-cli

1 upgraded, 0 newly installed, 0 to remove and 124 not upgraded.

Need to get 67.6 MB of archives.

After this operation, 109 MB of additional disk space will be used.

Get:1 <https://packages.microsoft.com/repos/azure-cli focal/main> amd64 azure-cli all 2.32.0-1~focal [67.6 MB]

Fetched 67.6 MB in 7s (10.3 MB/s)

(Reading database ... 90013 files and directories currently installed.)

Preparing to unpack .../azure-cli_2.32.0-1~focal_all.deb ...

Unpacking azure-cli (2.32.0-1~focal) over (2.25.0-1~focal) ...

Setting up azure-cli (2.32.0-1~focal) ...

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ az login --service-principal --username 0b79f3ed-db48-41c6-aae3-bc83d7b3c038 --password 2d730864-922b-470c-b716-4a7f7cc1e4f4 --tenant 946eba06-2542-4e41-add1-38704e6e1a42

AADSTS7000215: Invalid client secret provided. Ensure the secret being sent in the request is the client secret value, not the client secret ID, for a secret added to app '0b79f3ed-db48-41c6-aae3-bc83d7b3c038'.

Trace ID: 20ef2487-ede9-4d5d-9510-b7f029551000

Correlation ID: 1c51668f-d08d-45c6-8ee8-c6ea0f28ad52

Timestamp: 2022-02-04 22:33:37Z

To re-authenticate, please run:

az login

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ az login --service-principal --username 0b79f3ed-db48-41c6-aae3-bc83d7b3c038 --password 7GA7Q~Rp-r792ZB51Fa0GTW3yPEUHnvw3c20X --tenant 946eba06-2542-4e41-add1-38704e6e1a42

[

{

"cloudName": "AzureCloud",

"homeTenantId": "946eba06-2542-4e41-add1-38704e6e1a42",

"id": "b65b3475-4b7c-42a6-b76b-0d0fb4543556",

```
    "isDefault": true,
    "managedByTenants": [],
    "name": "Pay-As-You-Go",
    "state": "Enabled",
    "tenantId": "946eba06-2542-4e41-add1-38704e6e1a42",
    "user": {
      "name": "0b79f3ed-db48-41c6-aae3-bc83d7b3c038",
      "type": "servicePrincipal"
    }
  }
]
```


jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ uname -a

Linux DESKTOP-BM1PVKK 5.4.72-microsoft-standard-WSL2 #1 SMP Wed Oct 28 23:40:43 UTC 2020 x86_64 x86_64 x86_64 GNU/Linux

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ az vm image terms accept --publisher vmware-inc --offer tkg-capi --plan k8s-1dot21dot2-ubuntu-2004 --subscription b65b3475-4b7c-42a6-b76b-0d0fb4543556


```
{
  "accepted": true,
  "id": "/subscriptions/b65b3475-4b7c-42a6-b76b-0d0fb4543556/providers/Microsoft.MarketplaceOrdering/offerTypes/Microsoft.MarketplaceOrdering/offertypes/publishers/vmware-inc/offers/tkg-capi/plans/k8s-1dot21dot2-ubuntu-2004/agreements/current",
  "licenseTextLink": "https://mpcprodsa.blob.core.windows.net/legalterms/3E5ED_legalterms_VMWARE%253a2DINC%253a24TKG%253a2DCAPI%253a24K8S%253a2D1DOT21DOT2%253a2DUBUNTU%253a2D2004%253a24KQJXKK2NIUVNWR2B7X4J2ZWNZGFLGIQPBB46SSI4WO32VUTVGS6WFNL5JR3J6WPKJZK5YCCZV7WEHQGADEWGPC7PEJHUIA2S4ONKRFY.txt",
  "marketplaceTermsLink": "https://mpcprodsa.blob.core.windows.net/marketplaceterms/3EDEF_marketplaceterms_VIRTUALMACHINE%253a24AAK2OAIZEAWW5H4MSP5KSTVB6NDKKRTUBAU23BRFTWN4YC2MQLJUB5ZEYUOUJBVF3YK34CIVPZL2HWYASPGDUY5O2FWEGRBYOXWZE5Y.txt",
  "name": "k8s-1dot21dot2-ubuntu-2004",
```

```
    "plan": "k8s-1dot21dot2-ubuntu-2004",
    "privacyPolicyLink": "https://www.vmware.com/help/privacy/products-and-services-notice.html",
    "product": "tkg-capi",
    "publisher": "vmware-inc",
    "retrieveDatetime": "2022-02-04T22:36:06.9501837Z",
    "signature":
"BUXFMUFZFIV4WDATU3AZ6NDAGVI7XVV6572DFKM5SIGAJZQJC2FBUKKVVHBIVNVPKEPDHVIDYYETZEA
O3EDTI5J2XPCNJOLXDUDPPMI",
    "systemData": {
        "createdAt": "2022-02-04T22:36:10.553917+00:00",
        "createdBy": "b65b3475-4b7c-42a6-b76b-0d0fb4543556",
        "createdByType": "ManagedIdentity",
        "lastModifiedAt": "2022-02-04T22:36:10.553917+00:00",
        "lastModifiedBy": "b65b3475-4b7c-42a6-b76b-0d0fb4543556",
        "lastModifiedByType": "ManagedIdentity"
    },
    "type": "Microsoft.MarketplaceOrdering/offertypes"
}
```


```
jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ az vm image terms accept --publisher vmware-inc
--offer tkg-capi --plan k8s-1dot21dot2-ubuntu-1804 --subscription
b65b3475-4b7c-42a6-b76b-0d0fb4543556
```


```
{
    "accepted": true,
    "id":
"/subscriptions/b65b3475-4b7c-42a6-b76b-0d0fb4543556/providers/Microsoft.MarketplaceOrdering/o
fferTypes/Microsoft.MarketplaceOrdering/offertypes/publishers/vmware-inc/offers/tkg-capi/plans/k8s-
1dot21dot2-ubuntu-1804/agreements/current",
    "licenseTextLink":
"https://mpcprodsa.blob.core.windows.net/legalterms/3E5ED_legalterms_VMWARE%253a2DINC%253a
24TKG%253a2DCAPI%253a24K8S%253a2D1DOT21DOT2%253a2DUBUNTU%253a2D1804%253a24KQJX
KK2NIUVNWR2B7X4J2ZWNZGFLGIQPBB46SSI4WO32VUTVGS6WFNL5JR3J6WPKJZK5YCCZV7WEHQGADE
WGPC7PEJHUIA2S4ONKRFY.txt",
```

"marketplaceTermsLink":
"https://mpcprodsa.blob.core.windows.net/marketplaceterms/3EDEF_marketplaceterms_VIRTUALMACHINE%253a24AAK2OAIZEAWW5H4MSP5KSTVB6NDKKRTUBAU23BRFTWN4YC2MQLJUB5ZEYUOUJBVF3YK34CIVPZL2HWYASPGDUY5O2FWEGRBYOXWZE5Y.txt",

"name": "k8s-1dot21dot2-ubuntu-1804",

"plan": "k8s-1dot21dot2-ubuntu-1804",

"privacyPolicyLink": "https://www.vmware.com/help/privacy/products-and-services-notice.html",

"product": "tkg-capi",

"publisher": "vmware-inc",

"retrieveDatetime": "2022-02-04T22:36:39.0083174Z",

"signature":
"HCDUPG2654MPLPE4NDCPRYXNNKLRLJDXZ2HALX6D2X7PKSDIAVJNZYE4TZGH2Z2EFWGIYNIEGOHQTWFOS6IF4LODNVPQDZXXSS4C4UI",

"systemData": {

"createdAt": "2022-02-04T22:36:41.938492+00:00",

"createdBy": "b65b3475-4b7c-42a6-b76b-0d0fb4543556",

"createdByType": "ManagedIdentity",

"lastModifiedAt": "2022-02-04T22:36:41.938492+00:00",

"lastModifiedBy": "b65b3475-4b7c-42a6-b76b-0d0fb4543556",

"lastModifiedByType": "ManagedIdentity"

},

"type": "Microsoft.MarketplaceOrdering/offertypes"

}

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ ssh-keygen -t rsa -b 4096 -C "jcf@archemy.com"

Generating public/private rsa key pair.

Enter file in which to save the key (/home/jcf/.ssh/id_rsa):
/root/.ssh/id_rsa^[[D^[[D^[[D^[[D^[[D^[[D^[[D^[[D^[[D^^C

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ ssh-keygen -t rsa -b 4096 -C "jcf@archemy.com"

Generating public/private rsa key pair.

Enter file in which to save the key (/home/jcf/.ssh/id_rsa):

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Passphrases do not match. Try again.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /home/jcf/.ssh/id_rsa

Your public key has been saved in /home/jcf/.ssh/id_rsa.pub

The key fingerprint is:

SHA256:IgG4BPlhkvks688JlurJ+YoPq5ED0arOggt1FpFnBp0 jcf@archemy.com

The key's randomart image is:

```
+---[RSA 4096]----+
|o=. o+ .         |
|*oo...E          |
|oB..o+           |
|oo+  o           |
|oo. + . S        |
|+o.o . .         |
|X+               |
|@*= .            |
```

Identity Provider not configured. Some authentication features won't work.3pIWeR/H8Pjx5N8av7WQmr2XVLz3ZFRIXL0lHE0z6

P1dLrAuAEYHW7gt2OVcbh8iwFh5s9JcRJ1IVfvJyv6CLlJKBh1wWQ6KOgQKku3sZFN/J9ubmHFValidating configuration...RLOSSky/fGnFNL

fsqgLqeSuvSqCiQecUIIjj+8WcrlyyERFwjBD2Cofc8NvFyZEq1SpWEMyUs7YiKLn1FpkAKRI3wBrjw0mB/B1NpzuebGdy4Vf2+R5web socket connection establishedqGmT2e8my0m8WFZUXtnVOD7eN+H6yD/+1V5+CIo5p6gW7Q7UNyPS4TdyTmuPNYLNYONAAPRAuPRvkD4GWW+wtMWi+1XwCPGL

ONL1XFiFKRkratkvYXcsending pending 2 logs to UIgGuvZr3/l+XKDi0T1tdZjXQ7iOjwe9UC2nmHMVvrjwXlgj1wAD5r6H+cbnG36SmTyKPI

InbqmtQuNEvpSJn6PTRxm4rIGBgWGqHeehbqdWpH2f7dSlFUsing infrastructure provider azure:v0.4.15DWTFaiYhb62WGfdAxK8LN1QPI

K8O6pmIIrPoCogpcgcTTHxNejMTs7aww== jcf@archemy.com
Generating cluster configuration...

~ Setting up bootstrapper...

~ Bootstrapper created. Kubeconfig: /home/jcf/.kube-tkg/tmp/config_BE2uqeBp

~
Installing providers on bootstrapper...

~ Fetching providers

~ Installing cert-manager Version="v1.1.0"

~
Waiting for cert-manager to be available...

~ Installing Provider="cluster-api" Version="v0.3.23" TargetNamespace="capi-system"

~
Installing Provider="bootstrap-kubeadm" Version="v0.3.23" TargetNamespace="capi-kubeadm-bootstrap-system"

~
Installing Provider="control-plane-kubeadm" Version="v0.3.23" TargetNamespace="capi-kubeadm-control-plane-system"

~
Installing Provider="infrastructure-azure" Version="v0.4.15" TargetNamespace="capz-system"

~ Start creating management cluster...

~
Saving management cluster kubeconfig into /home/jcf/.kube/config

~ Installing providers on management cluster...

~
Fetching providers

~
Installing cert-manager Version="v1.1.0"
1,1 All

Waiting for cert-manager to be available...

Installing Provider="cluster-api" Version="v0.3.23" TargetNamespace="capi-system"

Installing Provider="bootstrap-kubeadm" Version="v0.3.23" TargetNamesp|X@== |

+----[SHA256]-----+

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ ssh-add ~/.ssh/id_rsa

Could not open a connection to your authentication agent.

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ eval $(ssh-agent)

Agent pid 32118

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ ssh-add ~/.ssh/id_rsa

Enter passphrase for /home/jcf/.ssh/id_rsa:

Identity added: /home/jcf/.ssh/id_rsa (jcf@archemy.com)

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ tanzu management-cluster create --ui

Downloading TKG compatibility file from 'projects.registry.vmware.com/tkg/framework-zshippable/tkg-compatibility'

Downloading the TKG Bill of Materials (BOM) file from 'projects.registry.vmware.com/tkg/tkg-bom:v1.4.0'

Downloading the TKr Bill of Materials (BOM) file from 'projects.registry.vmware.com/tkg/tkr-bom:v1.21.2_vmware.1-tkg.1'

ERROR 2022/02/04 17:47:23 svType != tvType; key=release, st=map[string]interface {}, tt=<nil>, sv=map[version:], tv=<nil>

Validating the pre-requisites...

Serving kickstart UI at http://127.0.0.1:8080

unable to open browser: exec: "xdg-open": executable file not found in $PATH

^Z

[1]+ Stopped   tanzu management-cluster create --ui

jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ bg

[1]+ tanzu management-cluster create --ui &

```
jcf@DESKTOP-BM1PVKK:~/tce-linux-amd64-v0.9.1$ cd ~
jcf@DESKTOP-BM1PVKK:~$ cd .ssh
jcf@DESKTOP-BM1PVKK:~/.ssh$ ls
id_rsa    id_rsa.pub
jcf@DESKTOP-BM1PVKK:~/.ssh$ vi id_rsa.pub
[1]+  Done                    tanzu management-cluster create --ui    (wd: ~/tce-linux-amd64-v0.9.1)
(wd now: ~/.ssh)
jcf@DESKTOP-BM1PVKK:~/.ssh$ kubectl config current-context
minikube
jcf@DESKTOP-BM1PVKK:~/.ssh$ kubectl get namespaces

NAME              STATUS   AGE

default           Active   115m
kube-node-lease   Active   115m
kube-public       Active   115m
kube-system       Active   115m
jcf@DESKTOP-BM1PVKK:~/.ssh$ cd .config
-bash: cd: .config: No such file or directory
jcf@DESKTOP-BM1PVKK:~/.ssh$ ld
ld: no input files
jcf@DESKTOP-BM1PVKK:~/.ssh$ ls -al
total 16
drwx------  2 jcf docker 4096 Feb  4 18:14 .
drwxr-xr-x 18 jcf jcf    4096 Feb  4 18:14 ..
-rw-------  1 jcf jcf    3434 Feb  4 17:39 id_rsa
-rw-r--r--  1 jcf jcf     741 Feb  4 17:39 id_rsa.pub
```

```
jcf@DESKTOP-BM1PVKK:~/.ssh$ cd ~/.config

jcf@DESKTOP-BM1PVKK:~/.config$ ls

tanzu

jcf@DESKTOP-BM1PVKK:~/.config$ cd tanzu

jcf@DESKTOP-BM1PVKK:~/.config/tanzu$ ls

config.yaml    tkg

jcf@DESKTOP-BM1PVKK:~/.config/tanzu$ cd tkg

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg$ ls

bom cluster-config.yaml clusterconfigs compatibility config.yaml features.json providers

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg$ cd clusterconfigs

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ ls

z92tjkitde.yaml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ cp z92tjkitde.yaml workloadcc.yaml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ vi workloadcc.yaml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ vi workloadcc.yaml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ pwd

/home/jcf/.config/tanzu/tkg/clusterconfigs

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ cd ~

jcf@DESKTOP-BM1PVKK:~$ tanzu cluster create --file
/home/jcf/.config/tanzu/tkg/clusterconfigs/workloadcn.yaml

Error: cluster name is required, please provide cluster name

Usage:

   tanzu cluster create CLUSTER_NAME [flags]


Flags:

   -d, --dry-run            Does not create cluster, but show the deployment YAML instead

   -f, --file string      Configuration file from which to create a cluster

   -h, --help                help for create
```

--tkr string TanzuKubernetesRelease(TKr) to be used for creating the workload cluster. If TKr name prefix is provided, the latest compatible TKr matching the TKr name prefix would be used

Global Flags:

--log-file string Log file path

-v, --verbose int32 Number for the log level verbosity(0-9)

Error: exit status 1

✕ exit status 1

jcf@DESKTOP-BM1PVKK:~$ tanzu cluster create workloadcn --file /home/jcf/.config/tanzu/tkg/clusterconfigs/workloadcn

.yaml

Error: required config variable 'CLUSTER_PLAN' not set

Usage:

tanzu cluster create CLUSTER_NAME [flags]

Flags:

-d, --dry-run Does not create cluster, but show the deployment YAML instead

-f, --file string Configuration file from which to create a cluster

-h, --help help for create

--tkr string TanzuKubernetesRelease(TKr) to be used for creating the workload cluster. If TKr name prefix is provided, the latest compatible TKr matching the TKr name prefix would be used

Global Flags:

--log-file string Log file path

-v, --verbose int32 Number for the log level verbosity(0-9)

Error: exit status 1

✕ exit status 1

jcf@DESKTOP-BM1PVKK:~$ tanzu cluster create workloadcn --file /home/jcf/.config/tanzu/tkg/clusterconfigs/workloadcn.yaml^C

jcf@DESKTOP-BM1PVKK:~$ vi /home/jcf/.config/tanzu/tkg/clusterconfigs/workloadcn.yaml

jcf@DESKTOP-BM1PVKK:~$ pwd

/home/jcf

jcf@DESKTOP-BM1PVKK:~$ cd .confg

-bash: cd: .confg: No such file or directory

jcf@DESKTOP-BM1PVKK:~$ cd .config

jcf@DESKTOP-BM1PVKK:~/.config$ cd ..

jcf@DESKTOP-BM1PVKK:~$ vi /home/jcf/.config/tanzu/tkg/clusterconfigs/workloadcn.yaml

jcf@DESKTOP-BM1PVKK:~$ cd /home/jcf/.config/tanzu/tkg/clusterconfigs

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ ls

workloadcc.yaml workloadcn.yaml z92tjkitde.yaml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ vi /home/jcf/.config/tanzu/tkg/clusterconfigs/workloadcc.ya

ml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ cp workloadcc.yaml workloadcn.yaml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ rm workloadcc.yaml

jcf@DESKTOP-BM1PVKK:~/.config/tanzu/tkg/clusterconfigs$ cd ~

jcf@DESKTOP-BM1PVKK:~$ tanzu cluster create --file /home/jcf/.config/tanzu/tkg/clusterconfigs/workloadcn.yaml

Validating configuration...

Warning: Pinniped configuration not found. Skipping pinniped configuration in workload cluster. Please refer to the documentation to check if you can configure pinniped on workload cluster manually

Creating workload cluster 'workloadcn'...

Waiting for cluster to be initialized...

Waiting for cluster nodes to be available...

Waiting for addons installation...

Waiting for packages to be up and running...

Workload cluster 'workloadcn' created

jcf@DESKTOP-BM1PVKK:~$ tanzu cluster get workloadcn

NAME	NAMESPACE	STATUS	CONTROLPLANE	WORKERS	KUBERNETES	ROLES
workloadcn	default	running	1/1	1/1	v1.21.2+vmware.1	<none>

ℹ

Details:

NAME	READY	SEVERITY	REASON	SINCE	MESSAGE
/workloadcn	True			3m55s	
├─ClusterInfrastructure - AzureCluster/workloadcn	True			5m59s	
├─ControlPlane - KubeadmControlPlane/workloadcn-control-plane	True			3m55s	
│ └─Machine/workloadcn-control-plane-nwwnm	True			4m4s	
└─Workers					
└─MachineDeployment/workloadcn-md-0					
└─Machine/workloadcn-md-0-687996b466-gg58l	True			37s	

```
jcf@DESKTOP-BM1PVKK:~$
jcf@DESKTOP-BM1PVKK:~$ tanzu cluster kubeconfig get workloadcn --admin
Credentials of cluster 'workloadcn' have been saved
You can now access the cluster by running 'kubectl config use-context workloadcn-admin@workloadcn'
jcf@DESKTOP-BM1PVKK:~$ kubectl config use-context workloadcn-admin@workloadcn
Switched to context "workloadcn-admin@workloadcn".
jcf@DESKTOP-BM1PVKK:~$
jcf@DESKTOP-BM1PVKK:~$ tanzu management-cluster get
  NAME       NAMESPACE      STATUS      CONTROLPLANE    WORKERS    KUBERNETES              ROLES
  mgmtcn     tkg-system     running     1/1             1/1        v1.21.2+vmware.1        management


Details:

NAME                                                            READY  SEVERITY  REASON  SINCE  MESSAGE
/mgmtcn                                                         True                     28m
├─ClusterInfrastructure - AzureCluster/mgmtcn                   True                     28m
├─ControlPlane - KubeadmControlPlane/mgmtcn-control-plane       True                     28m
│ └─Machine/mgmtcn-control-plane-g8rrc                          True                     28m
└─Workers
  └─MachineDeployment/mgmtcn-md-0
    └─Machine/mgmtcn-md-0-5798f75f86-w9lh6                      True                     28m


Providers:
```

NAMESPACE NAME TYPE PROVIDERNAME VERSION WATCHNAMESPACE

capi-kubeadm-bootstrap-system bootstrap-kubeadm BootstrapProvider kubeadm v0.3.23

capi-kubeadm-control-plane-system control-plane-kubeadm ControlPlaneProvider kubeadm v0.3.23

capi-system cluster-api CoreProvider cluster-api v0.3.23

capz-system infrastructure-azure InfrastructureProvider azure v0.4.15

jcf@DESKTOP-BM1PVKK:~$ tanzu management-cluster kubeconfig get

Error: failed to get pinniped-info from cluster: failed to get pinniped-info from the cluster

Usage:

tanzu management-cluster kubeconfig get [flags]

Examples:

Get management cluster kubeconfig

tanzu management-cluster kubeconfig get

Get management cluster admin kubeconfig

tanzu management-cluster kubeconfig get --admin

Flags:

--admin Get admin kubeconfig of the management cluster

--export-file string File path to export a standalone kubeconfig for management cluster

-h, --help help for get

Global Flags:

--log-file string Log file path

-v, --verbose int32 Number for the log level verbosity(0-9)

Error: exit status 1

✕ exit status 1

jcf@DESKTOP-BM1PVKK:~$

Installation of octant:

jcf@DESKTOP-BM1PVKK:~$ brew install octant

Running `brew update --preinstall`...

==> Auto-updated Homebrew!

Updated 1 tap (homebrew/core).

==> Updated Formulae

Updated 2 formulae.

==> Downloading https://ghcr.io/v2/homebrew/core/octant/manifests/0.25.0

100.0%

==> Downloading
https://ghcr.io/v2/homebrew/core/octant/blobs/sha256:eb38acc83abec8621a24b16dcf699099b8c562
5e89fb21

==> Downloading from
https://pkg-containers.githubusercontent.com/ghcr1/blobs/sha256:eb38acc83abec8621a24b16dcf6990

100.0%

==> Pouring octant--0.25.0.x86_64_linux.bottle.tar.gz

/home/linuxbrew/.linuxbrew/Cellar/octant/0.25.0: 7 files, 155.8MB

==> Running `brew cleanup octant`...

Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.

Hide these hints with HOMEBREW_NO_ENV_HINTS (see `man brew`).

jcf@DESKTOP-BM1PVKK:~$ octant

SCREENSHOTS

Installation of kuard demo application:

DEPLOY kuard demo application

https://docs.vmware.com/en/VMware-vSphere/7.0/vmware-vsphere-with-tanzu/GUID-E217C538-2241-4FD9-9D67-6A54E97CA800.html

https://docs.vmware.com/en/VMware-vSphere/7.0/vmware-vsphere-with-tanzu/GUID-5DFC347C-694B-4288-96DA-EAEB5818D951.html

Installation of sample guestbook application (optional, log incomplete):

Deploy sample guestbook application?

https://docs.vmware.com/en/VMware-vSphere/7.0/vmware-vsphere-with-tanzu/GUID-CC395BC6-5E65-43F0-9828-5C3BAD6B8385.html

Installation of hello-world sample application (optional, log incomplete):

Deploy hello-world application:

https://docs.vmware.com/en/VMware-Tanzu-Kubernetes-Grid/1.4/vmware-tanzu-kubernetes-grid-14/GUID-tanzu-k8s-clusters-tutorial.html

---

jcf@DESKTOP-BM1PVKK:~$

jcf@DESKTOP-BM1PVKK:~$ kubectl run --restart=Never --image=gcr.io/kuar-demo/kuard-amd64:blue kuard

pod/kuard created

jcf@DESKTOP-BM1PVKK:~$ kubectl get pods

NAME READY STATUS RESTARTS AGE

```
kuard      1/1         Running      0                16s

jcf@DESKTOP-BM1PVKK:~$ kubectl port-forward kuard 8080:8080

Forwarding from 127.0.0.1:8080 -> 8080

Forwarding from [::1]:8080 -> 8080

^Z

[1]+    Stopped                       kubectl port-forward kuard 8080:8080

jcf@DESKTOP-BM1PVKK:~$ bg

[1]+ kubectl port-forward kuard 8080:8080 &

jcf@DESKTOP-BM1PVKK:~$ Handling connection for 8080

Handling connection for 8080

Handling connection for 8080

ps -ef

UID                 PID       PPID    C STIME TTY                  TIME CMD

root                  1          0    0 15:13 ?              00:00:00 /init

root                  9          1    0 15:13 ?              00:00:00 /init

root                123          9    0 15:14 ?              00:01:30 /usr/bin/dockerd -p /var/run/docker.pid

root                134        123    0 15:14 ?              00:00:16 containerd --config
/var/run/docker/containerd/containerd.toml

jcf                9708          9    0 16:04 ?              00:00:05 minikube dashboard

jcf                9861       9708    0 16:04 ?              00:00:04 /usr/local/bin/kubectl --context minikube
proxy --port 0

jcf               10839          9    0 16:07 ?              00:00:05 minikube service hello-minikube

jcf               11999          9    0 16:13 ?              00:00:32 minikube tunnel

root              13058          1    0 16:16 ?              00:00:00 /init

root              13059      13058    0 16:16 ?              00:00:01 /init

jcf               13060      13059    0 16:16 pts/1          00:00:00 -bash

root              13569        123    0 16:19 ?              00:00:00 /bin/docker-proxy -proto tcp -host-ip
127.0.0.1 -host-port 4915root             13582        123    0 16:19 ?              00:00:00
/bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4915root             13596        123    0 16:19 ?
00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4916root             13610        123
```

0 16:19 ? 00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4916root 13624 123 0 16:19 ? 00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4916root 13641 9 0 16:19 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 1d862a6969root 13661 13641 0 16:19 ? 00:00:01 /sbin/init

root 13931 13661 0 16:19 ? 00:00:06 /lib/systemd/systemd-journald

tcpdump 13969 13661 0 16:19 ? 00:00:00 /usr/bin/dbus-daemon --system --address=systemd: --nofork --noproot 13974 13661 0 16:19 ? 00:00:16 /usr/bin/containerd

root 13981 13661 0 16:19 ? 00:00:00 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

root 14326 13661 1 16:19 ? 00:02:43 /usr/bin/dockerd -H tcp://0.0.0.0:2376 -H unix:///var/run/dockeroot 15256 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 568b7cc335root 15283 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 630b794dfb65535 15308 15256 0 16:20 ? 00:00:00 /pause

65535 15328 15283 0 16:20 ? 00:00:00 /pause

root 15331 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id da174dcdberoot 15332 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id d972b156df65535 15386 15331 0 16:20 ? 00:00:00 /pause

65535 15401 15332 0 16:20 ? 00:00:00 /pause

root 15440 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 023f342b2broot 15460 15440 0 16:20 ? 00:01:10 kube-scheduler --authentication-kubeconfig=/etc/kubernetes/scheroot 15475 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id afd5529414root 15504 15475 5 16:20 ? 00:08:35 kube-controller-manager --allocate-node-cidrs=true --authenticaroot 15517 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 9e1bf0f495root 15542 15517 4 16:20 ? 00:06:22 etcd --advertise-client-urls=https://192.168.49.2:2379 --cert-froot 15554 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 48518c0a7aroot 15588 15554 11 16:20 ? 00:17:42 kube-apiserver --advertise-address=192.168.49.2 --allow-privileroot 15795 13661 5 16:20 ? 00:08:56 /var/lib/minikube/binaries/v1.23.1/kubelet --bootstrap-kubeconfroot 16188 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 92bee7c59b65535 16209 16188 0 16:20 ? 00:00:00 /pause

root 16240 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 25d45e938565535 16259 16240 0 16:20 ? 00:00:00 /pause

root 16346 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 466cc63c23root 16366 16346 0 16:20 ? 00:00:40 /coredns

-conf /etc/coredns/Corefile

root 16400 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 3a311380e365535 16419 16400 0 16:20 ? 00:00:00 /pause

root 16441 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id a6eb0a8187root 16460 16441 0 16:20 ? 00:00:05 /usr/local/bin/kube-proxy --config=/var/lib/kube-proxy/config.croot 16672 13661 0 16:21 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 608263747aroot 16693 16672 0 16:21 ? 00:00:43 /storage-provisioner

jcf 32118 13059 0 17:42 ? 00:00:00 ssh-agent

jcf 58540 13060 0 18:54 pts/1 00:00:00 kubectl port-forward kuard 8080:8080

jcf 59161 13060 0 18:58 pts/1 00:00:00 ps -ef

jcf@DESKTOP-BM1PVKK:~$ kill -9 58540

jcf@DESKTOP-BM1PVKK:~$ ps -ef

UID PID PPID C STIME TTY TIME CMD

root 1 0 0 15:13 ? 00:00:00 /init

root 9 1 0 15:13 ? 00:00:00 /init

root 123 9 0 15:14 ? 00:01:30 /usr/bin/dockerd -p /var/run/docker.pid

root 134 123 0 15:14 ? 00:00:16 containerd --config /var/run/docker/containerd/containerd.toml

jcf 9708 9 0 16:04 ? 00:00:05 minikube dashboard

jcf 9861 9708 0 16:04 ? 00:00:04 /usr/local/bin/kubectl --context minikube proxy --port 0

jcf 10839 9 0 16:07 ? 00:00:05 minikube service hello-minikube

jcf 11999 9 0 16:13 ? 00:00:32 minikube tunnel

root 13058 1 0 16:16 ? 00:00:00 /init

root 13059 13058 0 16:16 ? 00:00:01 /init

jcf 13060 13059 0 16:16 pts/1 00:00:00 -bash

root 13569 123 0 16:19 ? 00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4915root 13582 123 0 16:19 ? 00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4915root 13596 123 0 16:19 ? 00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4916root 13610 123 0 16:19 ? 00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1 -host-port 4916root 13624 123 0 16:19 ? 00:00:00 /bin/docker-proxy -proto tcp -host-ip 127.0.0.1

-host-port 4916root 13641 9 0 16:19 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 1d862a6969root 13661 13641 0 16:19 ? 00:00:01 /sbin/init

root 13931 13661 0 16:19 ? 00:00:06 /lib/systemd/systemd-journald

tcpdump 13969 13661 0 16:19 ? 00:00:00 /usr/bin/dbus-daemon --system --address=systemd: --nofork --noproot 13974 13661 0 16:19 ? 00:00:16 /usr/bin/containerd

root 13981 13661 0 16:19 ? 00:00:00 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

root 14326 13661 1 16:19 ? 00:02:43 /usr/bin/dockerd -H tcp://0.0.0.0:2376 -H unix:///var/run/dockeroot 15256 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 568b7cc335root 15283 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 630b794dfb65535 15308 15256 0 16:20 ? 00:00:00 /pause

65535 15328 15283 0 16:20 ? 00:00:00 /pause

root 15331 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id da174dcdberoot 15332 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id d972b156df65535 15386 15331 0 16:20 ? 00:00:00 /pause

65535 15401 15332 0 16:20 ? 00:00:00 /pause

root 15440 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 023f342b2broot 15460 15440 0 16:20 ? 00:01:10 kube-scheduler --authentication-kubeconfig=/etc/kubernetes/scheroot 15475 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id afd5529414root 15504 15475 5 16:20 ? 00:08:36 kube-controller-manager --allocate-node-cidrs=true --authenticaroot 15517 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 9e1bf0f495root 15542 15517 4 16:20 ? 00:06:23 etcd --advertise-client-urls=https://192.168.49.2:2379 --cert-froot 15554 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 48518c0a7aroot 15588 15554 11 16:20 ? 00:17:45 kube-apiserver --advertise-address=192.168.49.2 --allow-privileroot 15795 13661 5 16:20 ? 00:08:57 /var/lib/minikube/binaries/v1.23.1/kubelet --bootstrap-kubeconfroot 16188 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 92bee7c59b65535 16209 16188 0 16:20 ? 00:00:00 /pause

root 16240 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 25d45e938565535 16259 16240 0 16:20 ? 00:00:00 /pause

root 16346 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 466cc63c23root 16366 16346 0 16:20 ? 00:00:40 /coredns -conf /etc/coredns/Corefile

root 16400 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2

-namespace moby -id 3a311380e365535 16419 16400 0 16:20 ? 00:00:00 /pause

root 16441 13661 0 16:20 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id a6eb0a8187root 16460 16441 0 16:20 ? 00:00:05 /usr/local/bin/kube-proxy --config=/var/lib/kube-proxy/config.croot 16672 13661 0 16:21 ? 00:00:01 /usr/bin/containerd-shim-runc-v2 -namespace moby -id 608263747a

apiVersion: apps/v1

root 16693 16672 0 16:21 ? 00:00:43 /storage-provisioner

jcf 32118 13059 0 17:42 ? 00:00:00 ssh-agent

jcf 59211 13060 0 18:59 pts/1 00:00:00 ps -ef

[1]+ Killed kubectl port-forward kuard 8080:8080

jcf@DESKTOP-BM1PVKK:~$ kubectl delete pod kuard

pod "kuard" deleted

jcf@DESKTOP-BM1PVKK:~$

jcf@DESKTOP-BM1PVKK:~$ kubectl get pods

No resources found in default namespace.

jcf@DESKTOP-BM1PVKK:~$ kubectl create namespace guestbook

namespace/guestbook created

jcf@DESKTOP-BM1PVKK:~$ kubectl get ns

NAME	STATUS	AGE
default	Active	33m
guestbook	Active	10s
kube-node-lease	Active	33m
kube-public	Active	33m
kube-system	Active	33m
tanzu-package-repo-global	Active	32m
tkg-system	Active	33m
tkg-system-public	Active	33m

jcf@DESKTOP-BM1PVKK:~$ kubectl create clusterrolebinding default-tkg-admin-privileged-binding

--clusterrole=psp:vmware-system-privileged --group=system:authenticated

clusterrolebinding.rbac.authorization.k8s.io/default-tkg-admin-privileged-binding created

jcf@DESKTOP-BM1PVKK:~$ kubectl get storageclass

NAME PROVISIONER RECLAIMPOLICY VOLUMEBINDINGMODE ALLOWVOLUMEEXPANSION AGE

default (default) kubernetes.io/azure-disk Delete WaitForFirstConsumer true 33m

jcf@DESKTOP-BM1PVKK:~$ vi hello-world.yaml

jcf@DESKTOP-BM1PVKK:~$ mv hello-world.yaml load-balancer-example.yaml

jcf@DESKTOP-BM1PVKK:~$ kubectl apply -f load-balancer-example.yaml

deployment.apps/hello-world created

jcf@DESKTOP-BM1PVKK:~$ kubectl describe services my-service

Error from server (NotFound): services "my-service" not found

jcf@DESKTOP-BM1PVKK:~$ kubectl expose deployment hello-world --type=LoadBalancer --name=my-service

service/my-service exposed

jcf@DESKTOP-BM1PVKK:~$ kubectl describe services my-service

Name: my-service

Namespace: default

Labels: app.kubernetes.io/name=load-balancer-example

Annotations: <none>

Selector: app.kubernetes.io/name=load-balancer-example

Type: LoadBalancer

IP Family Policy: SingleStack

IP Families: IPv4

IP: 100.68.141.135

IPs: 100.68.141.135

Port: <unset> 8080/TCP

TargetPort: 8080/TCP

NodePort: <unset> 30506/TCP

Endpoints: <none>

Session Affinity: None

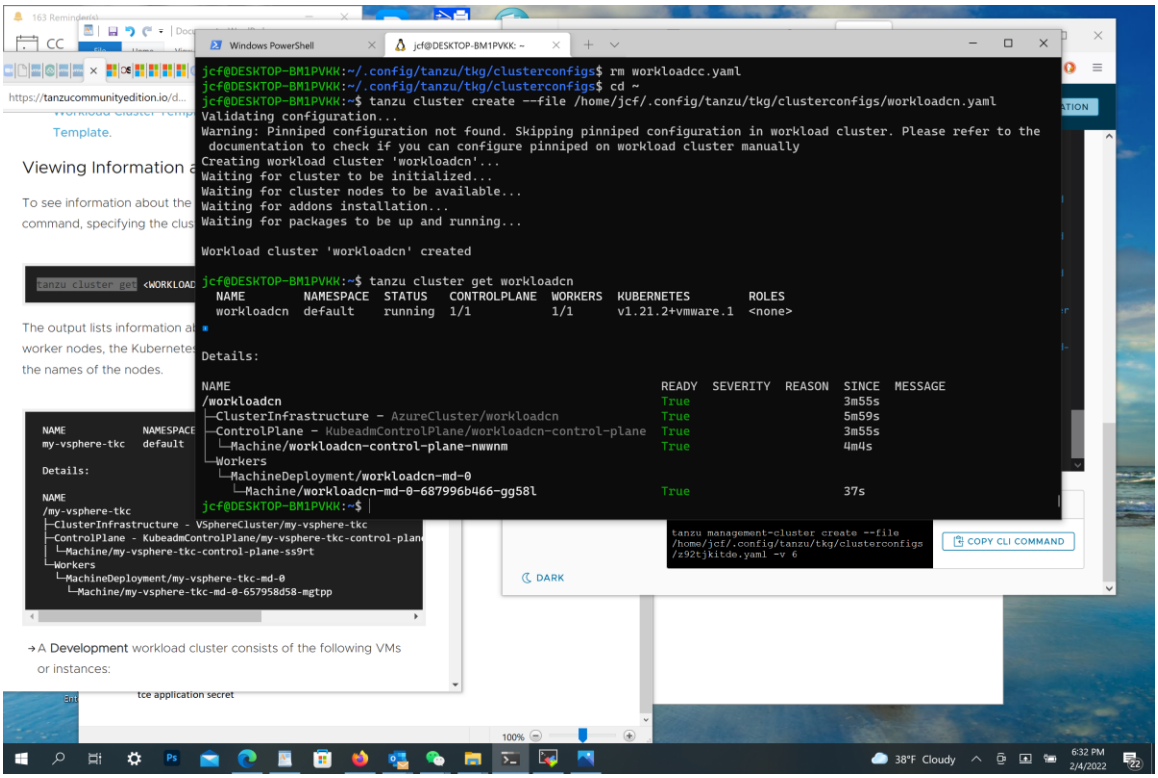
External Traffic Policy: Cluster

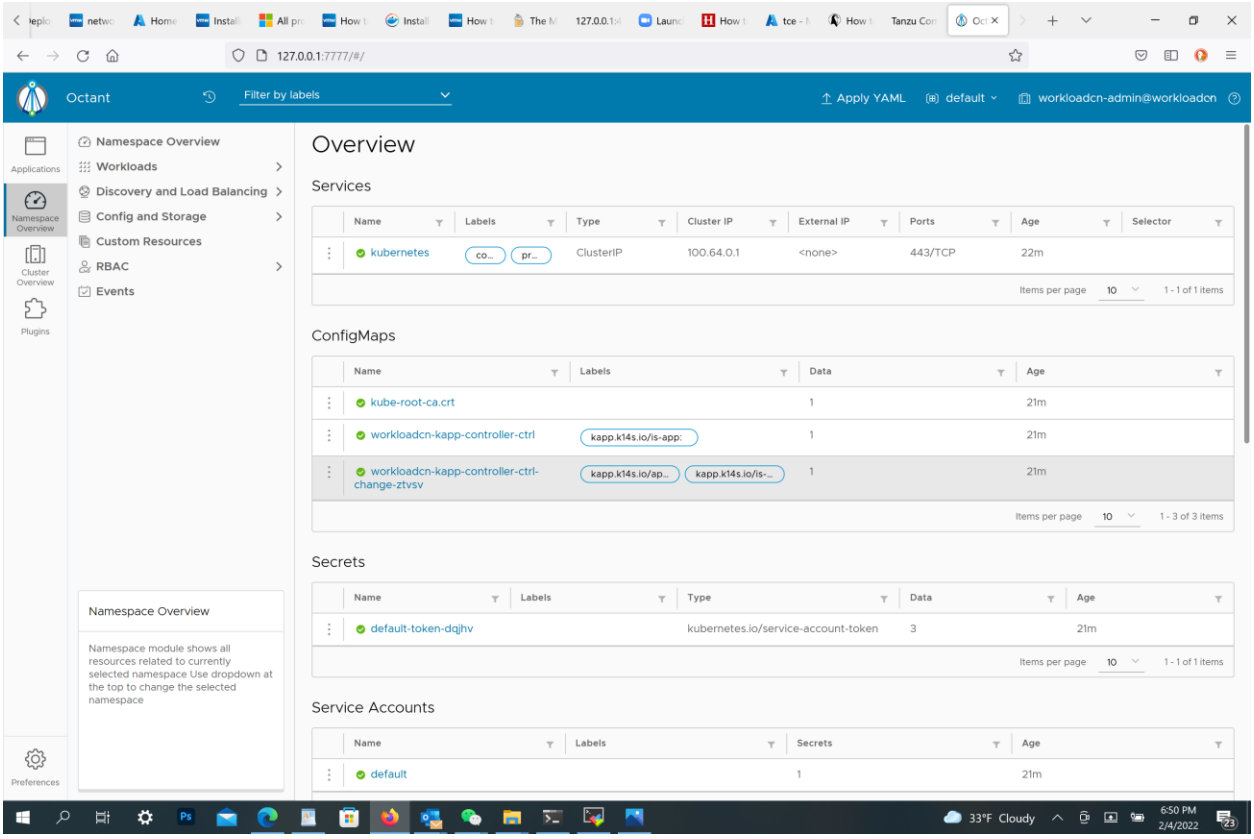
Events:

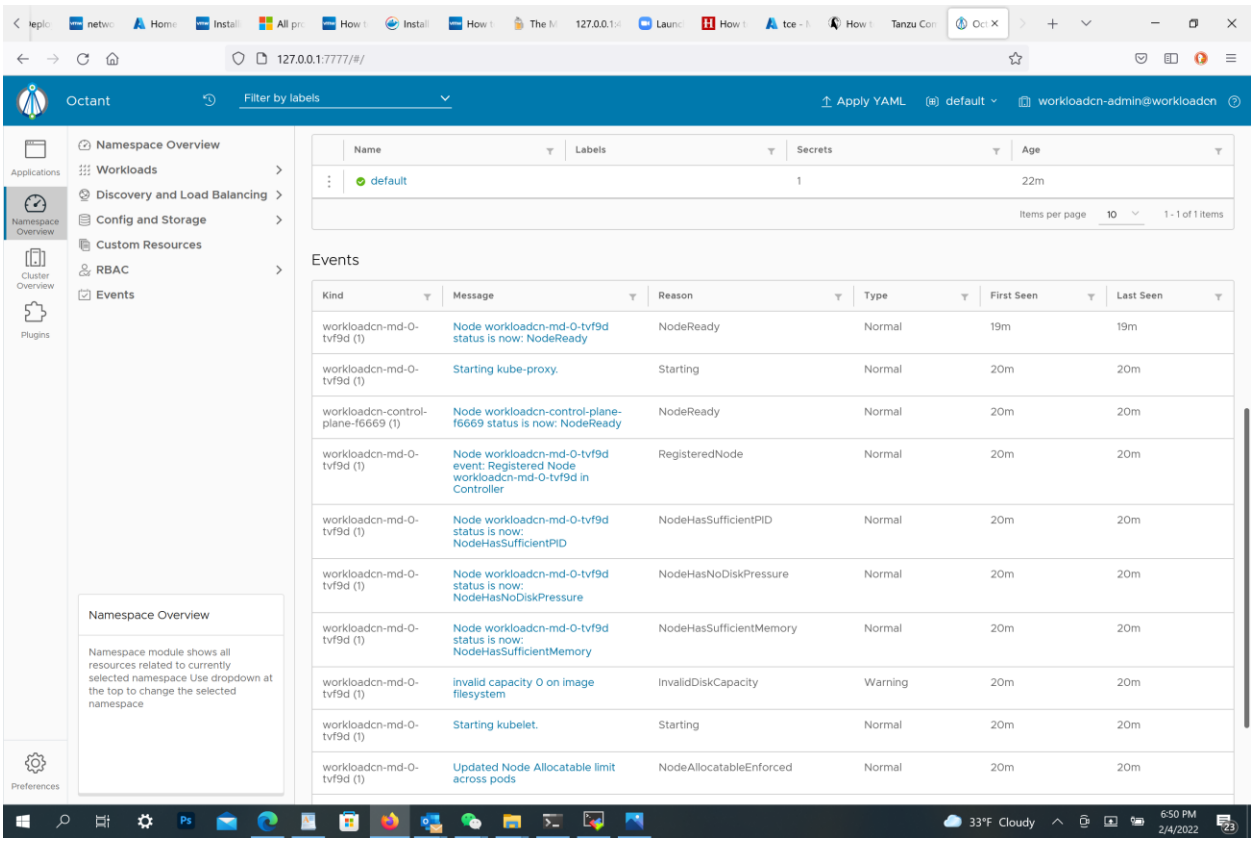
Type	Reason	Age	From	Message
Normal	EnsuringLoadBalancer	8s	service-controller	Ensuring load balancer

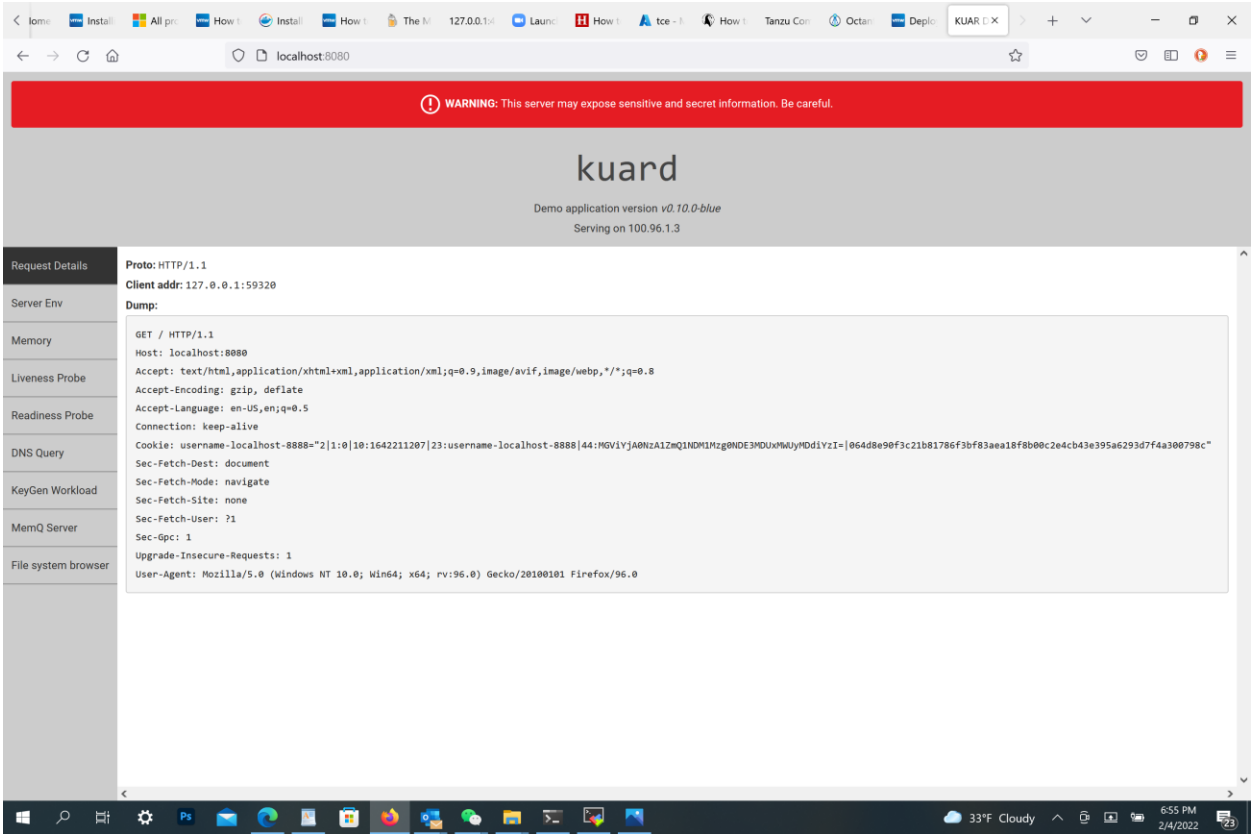
jcf@DESKTOP-BM1PVKK:~$

Screenshots:




127.0.0.1:7777/#/
Octant
Filter by labels
Apply YAML
default
workloadcn-admin@workloadcn
Applications
Namespace Overview
Cluster Overview
Plugins
Preferences
Namespace Overview
Workloads
Discovery and Load Balancing
Config and Storage
Custom Resources
RBAC
Events
Overview
Services
Name
Labels
Type
Cluster IP
External IP
Ports
Age
Selector
kubernetes
co...
pr...
ClusterIP
100.64.0.1
<none>
443/TCP
22m
Items per page
10
1 - 1 of 1 items
ConfigMaps
Name
Labels
Data
Age
kube-root-ca.crt
1
21m
workloadcn-kapp-controller-ctrl
kapp.k14s.io/is-app:
1
21m
workloadcn-kapp-controller-ctrl-change-ztvsv
kapp.k14s.io/ap...
kapp.k14s.io/is-...
1
21m
1 - 3 of 3 items
Secrets
Name
Labels
Type
Data
Age
default-token-dqjhv
kubernetes.io/service-account-token
3
21m
1 - 1 of 1 items
Service Accounts
Name
Labels
Secrets
Age
default
1
21m
Namespace Overview
Namespace module shows all resources related to currently selected namespace Use dropdown at the top to change the selected namespace
33°F Cloudy
6:50 PM
2/4/2022


127.0.0.1:7777/#/
Octant
Filter by labels
Apply YAML
default
workloadcn-admin@workloadcn
Applications
Namespace Overview
Cluster Overview
Plugins
Preferences
Namespace Overview
Workloads
Discovery and Load Balancing
Config and Storage
Custom Resources
RBAC
Events
Name
Labels
Secrets
Age
default
1
22m
Items per page
10
1 - 1 of 1 items
Events
Kind
Message
Reason
Type
First Seen
Last Seen
workloadcn-md-0-tvf9d (1)
Node workloadcn-md-0-tvf9d status is now: NodeReady
NodeReady
Normal
19m
19m
workloadcn-md-0-tvf9d (1)
Starting kube-proxy.
Starting
Normal
20m
20m
workloadcn-control-plane-t6669 (1)
Node workloadcn-control-plane-t6669 status is now: NodeReady
NodeReady
Normal
20m
20m
workloadcn-md-0-tvf9d (1)
Node workloadcn-md-0-tvf9d event: Registered Node workloadcn-md-0-tvf9d in Controller
RegisteredNode
Normal
20m
20m
workloadcn-md-0-tvf9d (1)
Node workloadcn-md-0-tvf9d status is now: NodeHasSufficientPID
NodeHasSufficientPID
Normal
20m
20m
workloadcn-md-0-tvf9d (1)
Node workloadcn-md-0-tvf9d status is now: NodeHasNoDiskPressure
NodeHasNoDiskPressure
Normal
20m
20m
workloadcn-md-0-tvf9d (1)
Node workloadcn-md-0-tvf9d status is now: NodeHasSufficientMemory
NodeHasSufficientMemory
Normal
20m
20m
workloadcn-md-0-tvf9d (1)
invalid capacity 0 on image filesystem
InvalidDiskCapacity
Warning
20m
20m
workloadcn-md-0-tvf9d (1)
Starting kubelet.
Starting
Normal
20m
20m
workloadcn-md-0-tvf9d (1)
Updated Node Allocatable limit across pods
NodeAllocatableEnforced
Normal
20m
20m
Namespace Overview
Namespace module shows all resources related to currently selected namespace Use dropdown at the top to change the selected namespace
33°F Cloudy
6:50 PM
2/4/2022


localhost:8080
WARNING: This server may expose sensitive and secret information. Be careful.
kuard
Demo application version v0.10.0-blue
Serving on 100.96.1.3
Request Details
Server Env
Memory
Liveness Probe
Readiness Probe
DNS Query
KeyGen Workload
MemQ Server
File system browser
Proto: HTTP/1.1
Client addr: 127.0.0.1:59320
Dump:
GET / HTTP/1.1
Host: localhost:8080
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
Accept-Encoding: gzip, deflate
Accept-Language: en-US,en;q=0.5
Connection: keep-alive
Cookie: username-localhost-8888="2|1:0|10:1642211207|23:username-localhost-8888|44:MGViYjA0NzA1ZmQ1NDM1Mzg0NDE3MDUxMWUyMDdiYzI=|064d8e90f3c21b81786f3bf83aea18f8b00c2e4cb43e395a6293d7f4a300798c"
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: none
Sec-Fetch-User: ?1
Sec-Gpc: 1
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:96.0) Gecko/20100101 Firefox/96.0
33°F Cloudy
6:55 PM
2/4/2022