REC Test Document - old

Introduction

We had successfully validated REC installation with post-install validation test and additional test such as RIC Robot Test and nanobot in AT&T Radio Edge Cloud Validation Lab (Middletown, NJ). These test cases have been identified manually with two different clusters such as HP Gen 10 and Nokia OpenEdge. More clusters will be test in the AT&T and Nokia labs in the later release.

Post-install validation

A post installation verification is required to ensure that all nodes and services were properly deployed.

You need to establish an ssh connection to the controller's VIP address and login with administrative rights.

1. Verify Deployment Success.

Enter the following command:

```
#tail /srv/deployment/log/bootstrap.log
```

You should see: *Installation complete, Installation Succeeded*.

2. Docker Version Test:

```
#docker --version
```

Expected Output: Docker version 19.03.3, build a872fc2f86

3. Confirm active state of required services

Enter the following commands:

```
#systemctl show -p SubState docker.service  | sed 's/SubState=//g'
```

Expected Output: running

```
#systemctl show -p SubState kubelet.service  | sed 's/SubState=//g'
```

Expected Output: running

```
#systemctl show -p ActiveState docker.service | sed 's/ActiveState=//g'
```

Expected Output: active

```
#systemctl show -p ActiveState kubelet.service | sed 's/ActiveState=//g'
```

Expected Output: active

4. Verify node functionality

Enter the following commands:

```
#kubectl get no --no-headers | grep -v Ready
```

Output: The command output shows nothing.

```
#kubectl get no --no-headers | wc -l
```

Output: The command output shows the number of REC nodes.

5. Verify Components

Enter the following command:

```
#kubectl get po --no-headers --namespace=kube-system --field-selector status.phase!=Running
```

Output: The command output shows nothing.

6. Confirm Package Manager Status (Helm)

- Docker registry is running, and images can be downloaded:

```
image=$(docker images -f 'reference=*/caas/hyperkube' --format="{{.Repository}}:{{.Tag}}"); docker pull $image
```

Output: *Status: Image is up to date for …*

- Chart repository is up and running: *(The curl command below is really one line.)*

curl -sS -XGET --cacert /etc/chart-repo/ssl/ca.pem --cert /etc/chart-repo/ssl/chart-repo1.pem

--key /etc/chart-repo/ssl/chart-repo1-key.pem https://chart-repo.kube-system.svc.rec.io:8088/charts/index.yaml

Output: output is a yaml file.

- Helm is able to run a sample application:

helm list

Output: caas-*infra*.

Additional Testing

More detail of each testing cases will be added in the near future. For example

1. Install RIC Robot test on top of REC

This set of tests which created a deploy-able robot container for testing robot test cases for RIC. It adds the interfaces to RIC applications and then to turn them into test cases. It is used an initial view of the Xapp Manager REST Interface and some other references to the E2Manager interface.

2. Nanobot

This is a second set of tests which run as a job and then give a robot test report. The deployment steps are very similar than the RIC Robot test since we already have the existing repo which cloned as part of deploying ric_robot_suite. Instead of pulling an image from azure, we will build the container.