Near RealTime RIC

Installation

Containerd and kubernetes (skip if already installed)

First things first install containerd, kubeadm and kubectl. The cluster configuration passed to kubeadm is available (here)[RICs/near-realtime/oran-sc/config.yaml] and the only required modification is under the "CertSANs" option you should change to the hostname of your machine. This modification ensures that the self-signed certificates generated by kubeadm will remain valid for your machine after a change in IP address, which is common for us, as long as you as acessing it using its hostname.

<--! xApps built with docker need to be imported into containerd under the k8s.io namespace -->

Step by step kubernetes setup

Create the kubernetes cluster using the (config.yaml)[RICs/near-realtime/oran-sc/config.yaml] provided.

```
kubeadm init --config config.yaml
```

Install flannel for networking to work

```
kubectl apply -f https://github.com/flannel-io/flannel/releases/latest/
download/kube-flannel.yml
```

Create namespaces in kubernetes

```
kubectl create ns ricplt
kubectl create ns ricxapp
```

Remove master taint so everything can run on the same machine

```
kubectl taint nodes --all node-role.kubernetes.io/control-plane-
```

Clone O-RAN SCs `ric-dep` repository

```
git clone
```

Start a chartsmuseum instance (this is a repository for helm charts).