kubetest

Install

```
1. git clone https://github.com/kubernetes/test-infra.git
2. cd test-infra && go install ./kubetest
3. cp $GOPATH/bin/kubetest /usr/bin/
```

Testing against local clusters

No need to deploy local clusters

```
1. cd $GOPATH/src/k8s.io/kubernetes
2. make WHAT=test/e2e/e2e.test GOGCFLAGS="-N -l" GOLDFLAGS=""
3. make ginkgo
4. export KUBECONFIG=/root/.kube/config
5. kubetest --test --test_args="--ginkgo.focus=PersistentVolumes" --
provider=local
```

Bring up local clusters firstly

```
1. cd $GOPATH/src/k8s.io/kubernetes
2. ./hack/install-etcd.sh (if already installed. To use: export
PATH="/root/go/src/k8s.io/kubernetes/third_party/etcd:${PATH}")
3. sudo PATH=$PATH hack/local-up-cluster.sh
```

Open up another terminal/tab and run:

```
1. export KUBECONFIG=/var/run/kubernetes/admin.kubeconfig
2. ./cluster/kubectl.sh get nodes # To check the status of the node is running
```

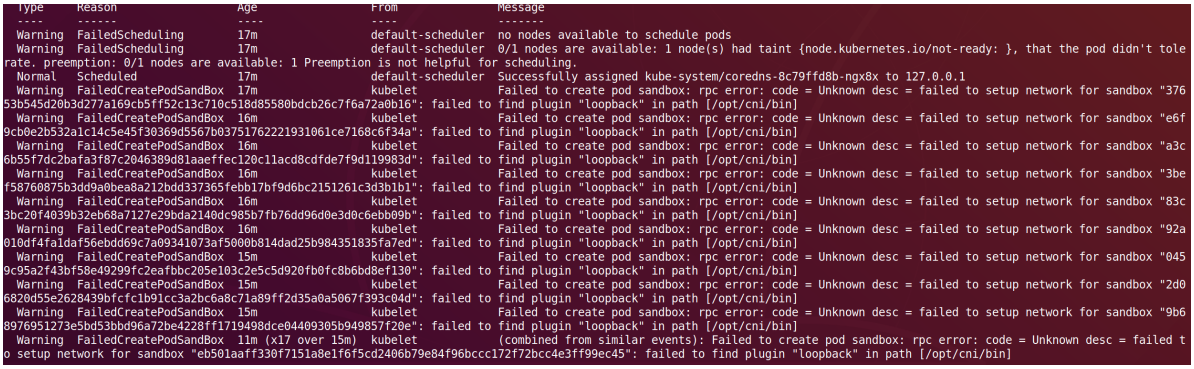
if the status of the node is not running, check the status of the coreDNS:

```
1. ./cluster/kubectl.sh get pods -n kube-system
```

if the status of the coreDNS is not running, describe the pod:

```
1. ./cluster/kubectl.sh describe pods coredns-8c79ffd8b-ngx8x -n kube-system
```

if the output like this:



we need to install cni:

```
1. mkdir $GOPATH/src/github.com/containernetworking
2. git clone https://github.com/containernetworking/plugins.git (change branch
that we needed)
3. cd $GOPATH/src/github.com/containernetworking/plugins
4. ./build_linux.sh
5. cp bin/* /opt/cni/bin/
```

run e2e test:

```
1. make WHAT=test/e2e/e2e.test GOGCFLAGS="-N -l" GOLDFLAGS=""
2. make ginkgo
3. kubetest --test --test_args="--ginkgo.focus=PersistentVolumes" --
provider=local
```