

Build and Execute Tests for tektoncd-CLI

This document talks about the steps to be performed to build tektoncd-CLI on Power (ppc64le).

Prerequisites

You must install these tools before proceeding with the build:

1. [go](#) (version: 1.12.0 or later) : The language Tekton Pipelines CLI is built in
2. [git](#): For source control
3. [kubectl](#) (version 1.15.0 or later) : For interacting with your kube cluster and to add “tkn” plugin.

Note: For kubectl version below 1.15.0, the “tkn” plugin may not be identified by kubectl. Hence, it is recommended to use 1.15.0 or later versions of kubectl.

Build Steps

To build and execute tests for tektoncd-CLI on ppc64le, please follow the steps specified below:

1. Please make sure that GOPATH is set to the go workspace. It is recommended to set GOPATH to a different directory other than GOROOT directory.
2. Clone source code

```
mkdir -p ${GOPATH}/src/github.com/tektoncd
cd ${GOPATH}/src/github.com/tektoncd
git clone https://github.com/tektoncd/cli.git
cd cli
```

3. Build the **tkn** binary in the current directory

```
go build ./cmd/tkn
# if you are building in your $GOPATH
GO111MODULE=on go build ./cmd/tkn
```

4. Execute the binary to verify it works

```
./tkn
```

5. Add **tkn** as a kubectl plugin

Please note that *kubectl* will find any binary named kubectl-* on your PATH and consider it as a plugin. After building *tkn*, create a link as kubectl-tkn

```
ln -s ./tkn /usr/local/bin/kubectl-tkn
```

6. *kubectl* will find any binary named kubectl-* on your PATH and consider it as a plugin

```
kubectl plugin list
Output:: /usr/local/bin/kubectl-tkn
```

Please make sure that **tkn** plugin should be listed in the output of the above command.

7. Verify **tkn** plugin by using following commands:

```
kubectl tkn help
kubectl tkn version
kubectl tkn pipeline
kubectl tkn task
```

Tests

To run tests, follow the steps below:

1. Change the directory to CLI source directory

```
cd ${GOPATH}/src/github.com/tektoncd
```

2. To run unit tests, execute following command:

```
go test ./...
```

3. To run integration tests against your existing Kubernetes cluster, execute following command:

```
go test -v -count=1 -tags=e2e -timeout=20m ./test
```

Please note that by default the tests run against your current *kubeconfig* context, but you can change that and other settings by using flags as shown below:

```
go test -v -count=1 -tags=e2e -timeout=20m ./test --kubeconfig
~/special/kubeconfig --cluster myspecialcluster
```

Done! The tektoncd-CLI is setup is complete.

References

<https://github.com/tektoncd/cli/blob/master/DEVELOPMENT.md>

<https://github.com/tektoncd/cli>