Installing Funktion

Table of Contents

To use `funktion` you will need a kubernetes or openshift cluster.

If you are on your laptop a quick way to get a kubernetes cluster is by installing and starting minikube and then installing kubectl and putting it on your `PATH` environment variable.

You will also need to download the funktion binary for your platform and add it to your `PATH` environment variable

To test your kubernetes cluster type the following commands which should succeed without error:

```
kubectl get node
kubectl get pod
```

Installing the Funktion Platform

There are a number of microservices required to run funktion:

- funktion operator: manages Deployments for functions and flows
- exposecontroller: exposes `Services` (functions or flows) over node ports, ingress, public cloud load balancers or openshift routes
- configmapcontroller: performs rolling updates of a `Deployment` when its associated `ConfigMap` changes

To install these microservices type:

```
funktion install platform
```

You will then get 3 `Deployment` resources created in the `funktion-system` namespace. You can view the pods created via:

```
kubectl get pod -n funktion-system
```

You can change the namespace they are installed into via the `--namespace` argument:

```
kubectl create namespace cheese
funktion install platform --namespace cheese
```

Using Funktion with the Fabric8 Developer Platform

If you are using the fabric8 developer platform then the exposecontroller and configmapcontroller microservices will already be installed. So you don't need to install them again.

So to install the funktion operator just type:

```
funktion install operator
```

The funktion operator `Deployment` will created in the `funktion-system` namespace. You can change the namespace they are installed into via the `--namespace` argument.

Setting up your namespace

Once you have the platform installed you need to install the runtimes and connectors in the namespace you are going to use funktion.

For example to install the default runtimes and some connectors type:

```
funktion install runtime
funktion install connector timer twitter
```

That will install the default runtimes (e.g. nodejs) along with the `timer` and `twitter` connectors so that you can use them inside flows.

To see a list of all the connectors available type:

```
funktion install connector --list
```

To install all the connectors type:

```
funktion install connector --all
```

Note that installing a connector just creates a kubernetes `ConfigMap` resource; no containers are created until you use the connector in a flow.