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Terminology

This section defines all the terms used in the `funktion` project

Function

A `function` is some source code to implement a function in some programming language like JavaScript, python or ruby.

Runtime

A `runtime` represents the kubernetes `Deployment` metadata required to take a function source in some programming language and implement it as one or more pods.

The `funktion operator` then detects a new `function` resource being created or updated and creates the associated `runtime` deployment

Connector

A `connector` represents a way to connect to some event source, including most network protocols, transports, databases, messaging systems, social networks, cloud services and SaaS offerings. Funktion supports over 200 event sources.

At the implementation level a `Connector` represents the kubernetes `Deployment` metadata required to take the `Flow` and implement it as one or more kubernetes `pods`.

Flow

A `flow` is a sequence of `steps` such as consuming events from an `endpoint` or invoking a `function`.

For example here is a sample flow in YAML format.

```
flows:
  - steps:
    - kind: endpoint
      uri: timer://foo?fixedRate=true&period=5000
    - kind: endpoint
      uri: http://myendpoint/
```

Note that a Flow resource can contain multiple sequential flows. Each flow object in the YAML is a sequence of steps.

Creating a `flow` results in the `funktion operator` creating an associated `Deployment` which implements the flows.

Funktion Operator

The `funktion operator` is a runnning `pod` in kubernetes which monitors for all the funktion resources like `function`, `runtime`, `connector` and `flow` and creates, updates or deletes the associated kubernetes `deployments` and `services` so that as you create a `flow` or `function` the associated kubenretes resources are created.