

Experiment 17: Skaffold on k3d

In this experiment, we will deploy skaffold with k3d

Skaffold (at least version v0.38.0) [installed](#)

For MacOS:

```
$ brew install skaffold
```

For Windows:

```
C:\k3d> choco install skaffold
```

Usage

git clone <https://github.com/GeorgeNiece/skaffold-k3d.git>

Create insecure registry, k3s cluster and wire them up using wrapper script:

```
$ ./k3d-create-cluster.sh
```

Make sure your KUBECONFIG points to k3s cluster context (if not already):

```
$ echo $KUBECONFIG  
/Users/<username>/.config/k3d/k3s-local/kubeconfig.yaml
```

Start the local development environment:

```
$ skaffold dev -p local --port-forward
```

An example node.js app is available now in your web browser at:

localhost:3000

Make some changes to `src/index.js` and they will be synchronized to the pod(s) running the app.

Kustomize configuration

Kustomize configuration is based on [Directory Structure Based Layout](#) in order to use multiple environments with different configuration. In order to use different clusters remember to specify the corresponding context before applying changes using Skaffold.

```
├── base  
│   ├── deployment.yaml  
│   ├── hpa.yaml  
│   ├── kustomization.yaml  
│   └── service.yaml  
└── overlays  
    ├── local  
    └── deployment-patch.yaml
```

```
|
|├─ hpa-patch.yaml
|├─ kustomization.yaml
└─ test
    │├─ deployment-patch.yaml
    │├─ hpa-patch.yaml
    │└─ kustomization.yaml
```