Skaffold Kubernetes dev loop

CONCEPTS

skaffold dev is the inner loop: it builds, deploys and tails logs, rebuilds on file change, and deletes what it deployed when you press Ctrl+C. skaffold run deploys once and leaves it.

- **build** images from artifacts
- **test** optional
- **render** manifests with new tags
- **deploy** kubectl / helm / kustomize
- **verify** optional checks

Skaffold only drives your existing tools: Docker or buildpacks to build, kubectl, Helm or Kustomize to deploy. Its own config is skaffold.yaml.

DEV LOOP

`skaffold dev`
Build, deploy, watch, tail logs

`skaffold dev --port-forward=services`
Forward service ports locally

`skaffold dev --no-prune --cleanup=false`
Keep resources after exit

`skaffold dev -w <image>`
Watch only matching images

RUN, BUILD & DEPLOY

`skaffold run`
Build and deploy once

`skaffold run --tail`
Deploy and stream logs

`skaffold build`
Build images only

`skaffold build -q`
Print only built image names

`skaffold build --push`
Push built images

RUN, BUILD & DEPLOY (cont.)

`skaffold build --file-output <file>`
Save built tags as JSON

`skaffold deploy -a <file>`
Deploy pre-built images

DEBUG & VERIFY

`skaffold debug`
Dev loop with debug ports

`skaffold debug --port-forward=user,debug`
Forward debug ports

CONFIG & PROFILES

`skaffold init`
Generate skaffold.yaml

`skaffold fix`
Print config in newest schema

`skaffold diagnose`
Inspect effective config

`skaffold dev -f <file>`
Use another config file

`skaffold dev -p <profile>`
Activate a profile

RENDER & DELETE

`skaffold render`
Print rendered manifests

`skaffold render -o <file>`
Write manifests to a file

`skaffold delete`
Remove deployed resources

TARGETING & IMAGES

`skaffold dev -n <ns>`
Deploy to a namespace

`skaffold dev --kube-context <ctx>`
Use a kube context

`skaffold dev -d <repo>`
Default image repository