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

`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

`skaffold verify`
Run verify tests

CONFIG & PROFILES

`skaffold init`
Generate skaffold.yaml

`skaffold init --generate-manifests`
Also create basic manifests

`skaffold init -k <glob>`
Pick Kubernetes manifests

`skaffold fix`
Print config in newest schema

`skaffold fix --overwrite`
Upgrade skaffold.yaml in place

`skaffold diagnose`
Inspect effective config

`skaffold diagnose --yaml-only`
Print merged skaffold.yaml

`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