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