

```
deployment-prod-copy-final.yaml

apiVersion: apps/v1
kind: Deployment
metadata:
  name: account-service-prod-v2-FINAL
spec:
  replicas: 10 # was 3, changed to 10 for prod
  template:
    spec:
      containers:
        - image: account/v1.2.3-hotfix
          env:
            - name: DB_PASSWORD
              value: "password123" # TODO: fix
```

Stop Hardcoding Your Kubernetes Environments.

Why you need Helm to manage deployments at scale. 🙌

⚠ THE PROBLEM

The Copy-Paste Nightmare.

✎ dev.yaml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: account-svc
spec:
  replicas: 1

  template:
    spec:
      containers:
        - image: app:dev
```

📁 staging.yaml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: account-svc
spec:
  replicas: 3

  template:
    spec:
      containers:
        - image: app:rc1
```

🚀 prod.yaml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: account-svc
spec:
  replicas: 10

  template:
    spec:
      containers:
        - image: app:v1.2
```



Managing 50+ microservices with raw YAML is unscalable.



Hardcoding environment variables leads to human error.



Rollbacks are painful and completely manual.

Helm: Dynamic Templating.



The Chart: Your base skeleton — Deployment, Service, ConfigMap, Ingress.



The values.yaml: Environment-specific variables injected at runtime.



Write the skeleton once. Deploy it anywhere — dev, staging, prod.

One Command. Total Control.

Terminal — helm

Deploy your entire stack

```
$ helm upgrade --install my-app ./chart -f values-prod.yaml
```

✓ Release "my-app" upgraded. Revision: 4

Something went wrong? Roll it back instantly.

```
$ helm rollback my-app 3
```

✓ Rollback success! Revision: 5 (rolled back to 3)

Check release history

```
$ helm history my-app
```

REVISION	STATUS	DESCRIPTION
3	superseded	Upgrade complete
4	superseded	Upgrade complete
5	deployed	Rollback to 3



Helm bundles all resources into a single "Release."



Upgrading is one command: **helm upgrade my-app ./chart**



Botched a deploy? **helm rollback my-app 1** — instant recovery.

The Ultimate Debate: Helm or Kustomize?



Helm

Templating engine + package manager. Charts, values, releases.

vs



Kustomize

Overlay-based patching. Native kubectl support. No templating.

💬 Let me know your pick in the comments.