

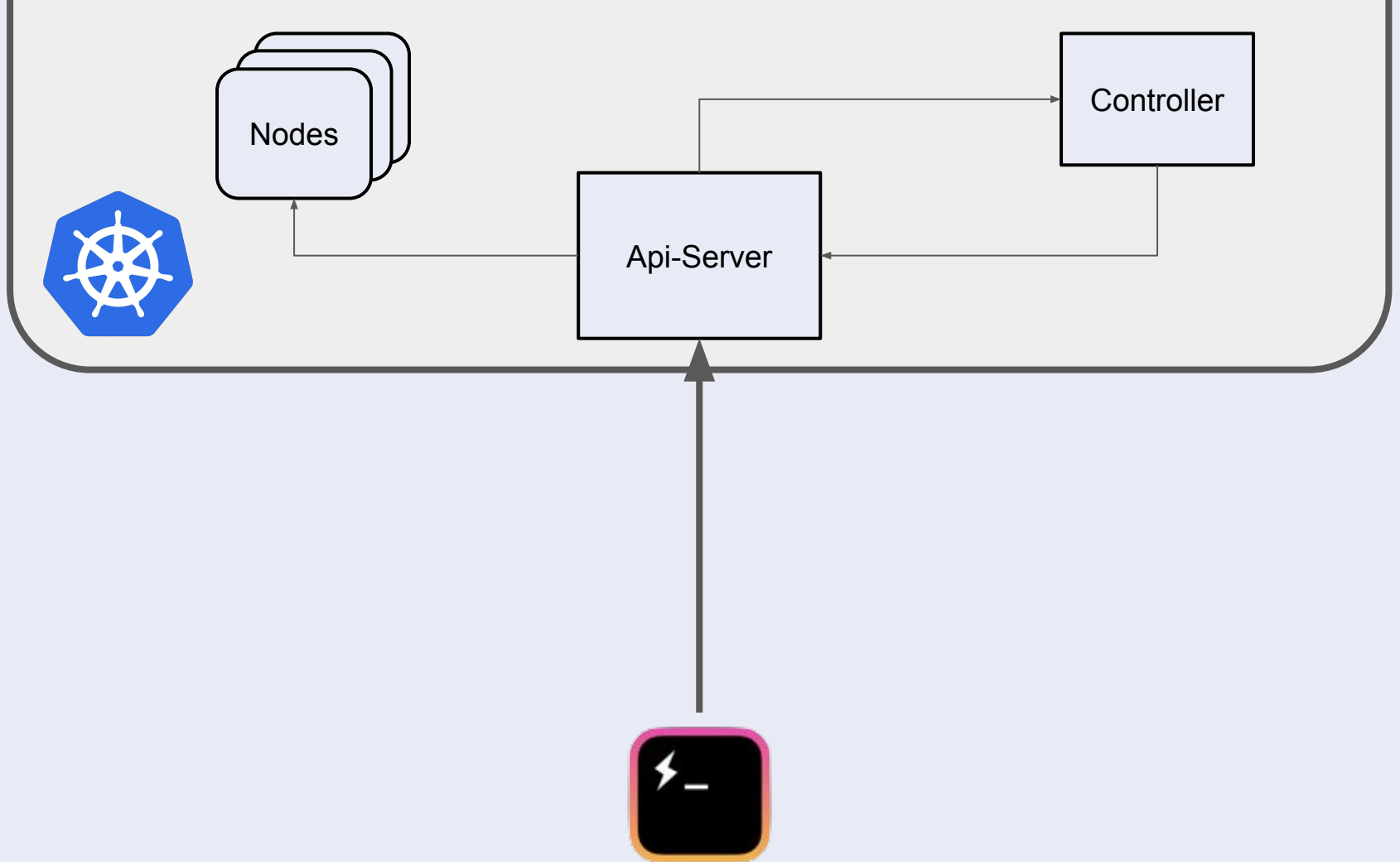
Kustomizons
nos déploiements avec
style 🌟 !







```
$ kubectl run backend --image=docker.bakery.com/backend
```

YOTAM OTTOLENGHI

PLENTY MORE



AROUND THE WORLD IN 100 DISHES

real chocolate

Chantal Coady



Apples for Sam

Tessa Kiros



jamie
does...

SPAIN ITALY
MOROCCO SWEDEN
GREECE FRANCE

PENGUIN
MICHAEL
JOSEPH

```
apiVersion: apps/v1      apiVersion: v1      apiVersion: v1
kind: Deployment          kind: Service        kind: ConfigMap
metadata:                 metadata:              metadata:
  name: backend           name: backend        name: backend
spec:                     labels:              data:
  selector:               app: backend      database.user: "foo"
    matchLabels:          spec:              stripe.user: "bar"
      app: backend        ports:
template:                 - name: http      apiVersion: networking.k8s.io/v1beta1
  metadata:               port: 8080        kind: Ingress
  labels:                 targetPort: 8080  metadata:
    app: backend          protocol: TCP    name: backend
spec:                    selector:        spec:
  containers:             app: bakery    rules:
    - name: backend       - host: api.bakery.com
      image: docker.bakery.com/backend
      ports:
        - name: http
          containerPort: 8080
                                http:
                                  paths:
                                    - backend:
                                      service:
                                        name: backend
                                        port:
```




BERAS
KENCUR
2600/9r

KUNYIT
ASAM
2600/9r

BANDREK
2600/9r

BE
CALM SOAP
ARTEGANA
65k

SOAP
DAILY
DETOX

KING OF
FIRE SOAP
ARTEGANA

ALMOND
321/9r

WALNUT
281/9r

PISTACHIO
310/9r

MACADAMIA
140/9r

RAISIN
100/9r

BLUEBERRY
412/9r

CRANBERRY
250/9r

PITTED
PRUNE
167/9r

GOJI
BERRY
328/9r

APRICOT
131/9r

PUMPKIN
SEED
150/9r

COCOA
BEANS
500/9r

MULTI
115/9r

MADU
LENGKAS
134/9r

TEMULAWAK
JAWA
TUNGGAL
150/9r

ANGGUR
SULTAN
1500/9r

TEH
REMPAH
2600/9r

JAJA
TELANG
1500/9r

BROWN
FLAXSEED
105/9r

GOLDEN
FLAXSEED
154/9r

CHIA
SEED
240/9r

PURE
KAKAO
POWDER
650/9r

BLACK
HIMALAYA
SALT
165/9r

SALT
165/9r





```
deploy bakery:
  stage: deploy
  image: docker.backery.com/kubectl
  script:
    - kubectl apply -k k8s/ --dry-run=client
    - kubectl apply -k k8s/ --dry-run=server
    - kubectl apply -k k8s/
```





flux



argo

```
apiVersion: source.toolkit.fluxcd.io/v1beta1
kind: GitRepository
metadata:
  name: example
  namespace: flux-system
spec:
  interval: 30s
  ref:
    branch: master
  url: https://gitlab.com/bakery/ops
```






```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
  namespace: bakery
  labels:
    app: bakery
    module: backend
    version: v1
  annotations:
    support_team: support@bakery.com
    support_ticketing: gitlab.com/bakery/backend/issues
    support_alerts: '01-02-03-04-05'
spec:
  ...
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  ...
spec:
  template:
    spec:
      containers:
        - name: backend
          image: docker.bakery.com/backend:v1.2.3-6b5048
```

...

containers:

- name: backend

...

env:

- name: DATABASE_USERNAME
valueFrom:
 configMapKeyRef:
 name: backend
 key: database.username
- name: DATABASE_PASSWORD
valueFrom:
 secretKeyRef:
 name: backend
 key: database.password


```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
spec:
  replicas: 3
  template:
    spec:
      containers:
      - name: backend
        ...
      resources:
        requests:
          cpu: "1000m"
          memory: "2Gi"
```



```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
spec:
  strategy:
    rollingUpdate:
      maxSurge: 2
      maxUnavailable: 0
    type: RollingUpdate
  template:
    spec:
      containers:
        - name: backend
          ...
```



```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
spec:
  template:
    spec:
      containers:
        - name: backend
          ports:
            - name: http
              containerPort: 8080
          readinessProbe:
            httpGet:
              port: http
              path: /healthz
```



```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
spec:
  template:
    spec:
      containers:
        - name: backend
          ...
          env:
            - name: LOGGING_FORMAT
              value: "GCP_JSON"
          ...
        ...
      ...
    ...
  ...
  ...
```

```
apiVersion: v1
kind: ServiceAccount
metadata:
  name: backend
```












NGINX


```
apiVersion: {{ template "deployment.apiVersion" . }}
kind: Deployment
metadata:
  labels:
    app: {{ template "nginx-ingress.name" . }}
    chart: {{ template "nginx-ingress.chart" . }}
    heritage: {{ .Release.Service }}
    release: {{ template "nginx-ingress.releaseLabel" . }}
    {{ .Values.controller.componentLabelKeyOverride | default
"app.kubernetes.io/component" }}: controller

    {{- if .Values.controller.deploymentLabels }}
    {{ toYaml .Values.controller.deploymentLabels | indent 4 }}
    {{- end }}
name: {{ template "nginx-ingress.controller.fullname" . }}
annotations:
  {{ toYaml .Values.controller.deploymentAnnotations | indent 4 }}
spec:
  selector:
    matchLabels:
      app: {{ template "nginx-ingress.name" . }}
```


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Macarons

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 Gul: passionfruit
 Gul: Citron
 Yellow: Lemon
 Grøn: Æble & stikkelsbær
 Green: apple/ gooseberry
 Hvid: Lakrids & ingefær
 White: Liquorice/ ginger
 Lysebrun: Macadamia
 Light brown: macademla
 Brun: Chokolade
 Brown: Chocolate
 Blå: Cool mint
 Blue: cool mint
 Rød: Skovbær
 Red: Berries

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chokoladebund**
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SWEET VALENTINE







▼ repo

- ⚙️ backend.yaml
- ⚙️ database.yaml
- ⚙️ frontend.yaml
- ⚙️ fs.yaml

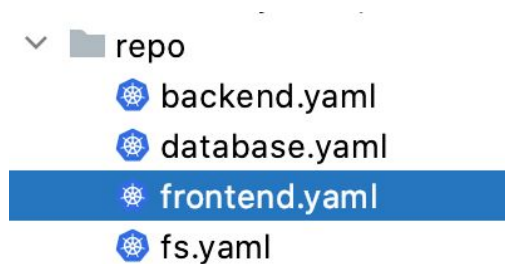
```
# backend.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
...
---
apiVersion: v1
kind: Service
metadata:
  name: backend
...
---
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: backend
spec:
  rules:
    - host: api.bakery.com
...

```

▼ repo

- backend.yaml
- database.yaml**
- frontend.yaml
- fs.yaml

```
# database.yaml
apiVersion: apps/v1
kind: StatefulSet
metadata:
  name: database
...
---
apiVersion: v1
kind: Service
metadata:
  name: database
...
---
apiVersion: v1
kind: ConfigMap
metadata:
  name: database
...
---
apiVersion: v1
kind: Secret
metadata:
  name: database
...
```



```
# frontend.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: frontend
...
---
apiVersion: v1
kind: Service
metadata:
  name: frontend
...
---
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: frontend
spec:
  rules:
    - host: bakery.com
...
---
```


- ▼ repo
- backend.yaml
 - database.yaml
 - frontend.yaml
 - fs.yaml**

```
# fs.yaml
apiVersion: apps/v1
kind: StatefulSet
metadata:
  name: fs
...
---
apiVersion: v1
kind: Service
metadata:
  name: fs
...
---
apiVersion: v1
kind: ConfigMap
metadata:
  name: fs
...
---
apiVersion: v1
kind: Secret
metadata:
  name: fs
...
```



▼ repo

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
- kustomization.yaml**

```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization

resources:
- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
```




```
$ kubectl apply -k repo
```

```
$ kustomize build repo | kubectl apply -f -
```




▼ repo

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
- kustomization.yaml**

```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization

resources:
- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
```

```
# database.yaml
```

```
apiVersion: v1
kind: ConfigMap
metadata:
  name: backend
data:
  url: "jdbc:postgresql://database:5432/bakery"
  username: "backend-user"
```

```
---
```

```
apiVersion: v1
kind: Secret
metadata:
  name: backend
data:
  password: "WXlXRGlHalk="
```

```
# kustomization.yaml
```

```
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
resources:
```

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml

```
configMapGenerator:
```

- name: database
- literals:
 - url="jdbc:postgresql://database:5432/bakery"
 - username="backend-user"

```
secretGenerator:
```

- name: database
- literals:
 - password="YyWDiGjY"


```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
...
```

```
configMapGenerator:
```

```
- name: database
```

```
  literals:
```

```
    - ...
```

```
  env:
```

```
    - ...
```

```
  files:
```

```
    - ...
```

```
...
```



```
# result.yaml
apiVersion: v1
data:
  url: jdbc:postgresql://database:5432/bakery
  username: backend-user
kind: ConfigMap
metadata:
  name: database-kb4tdd68h6
---
apiVersion: v1
data:
  password: WXlXRGlHaIk=
kind: Secret
metadata:
  name: database-76dm9c8t89
type: Opaque
```

```
# result.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
spec:
  template:
    spec:
      containers:
        - env:
            - name: DATABASE_URL
              valueFrom:
                configMapKeyRef:
                  key: url
                  name: database-kb4tdd68h6
            - name: DATABASE_USERNAME
              valueFrom:
                configMapKeyRef:
                  key: username
                  name: database-kb4tdd68h6
            - name: DATABASE_PASSWORD
              valueFrom:
                secretKeyRef:
                  key: password
                  name: database-76dm9c8t89
          image: docker.bakery.com/backend
          name: backend
```




▼ repo

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
- kustomization.yaml**

```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
namespace: feature-branch-XYZ
```

```
resources:
- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
```

```
...
```

```
...
apiVersion: v1
data:
  url: jdbc:postgresql://database:5432/bakery
  username: backend-user
kind: ConfigMap
metadata:
  name: database-kb4tdd68h6
  namespace: feature-branch-XYZ
...
```


▼ repo

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
- kustomization.yaml**

```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization

namePrefix: dev-
nameSuffix: -kevin

resources:
- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml

...
```

```
...  
apiVersion: apps/v1  
kind: Deployment  
metadata:  
  name: dev-backend-kevin  
...
```

▼ repo

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
- kustomization.yaml**

```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization

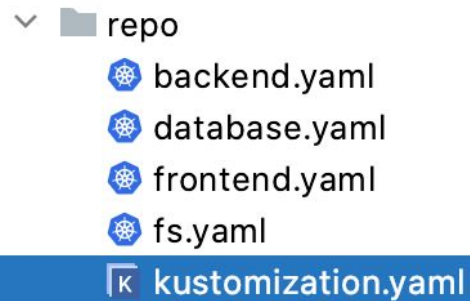
images:
- name: docker.bakery.com/backend
  newName: inner.bakery.com/backend
  newTag: 1.6.8
- name: docker.bakery.com/frontend
  newName: inner.bakery.com/frontend
  digest: f2fff79f2f2bf2d2418e3...70ccdfcc3f661a086b

resources:
- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
```

...


```
""
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
spec:
  selector:
    ""
  template:
    ""
    spec:
      containers:
        - image: inner.bakery.com/backend:1.6.8
```

```
""
---
apiVersion: apps/v1
kind: Deployment
metadata:
  name: frontend
spec:
  selector:
    ""
  template:
    ""
    spec:
      containers:
        - image: inner.bakery.com/frontend@sha256:f2fff79f2f2bf2d2418e3...70ccdfcc3f661a086b
```



```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
replicas:
- name: backend
  count: 3
```

```
resources:
- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
```

...

```
...
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend
spec:
  replicas: 3
  selector:
    matchLabels:
      app: backend
  template:
    metadata:
      labels:
        app: backend
    spec:
      containers:
        - image: docker.bakery.com/backend
...

```

▼ repo

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml
- kustomization.yaml**

```
# kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization

...

helmCharts:
- name: extra-component
  valuesInline:
    foo:
      bar: true
      noo: false
    another:
      value: 'xyz'
  releaseName: Xtra
  version: 1.2.3
  repo: https://gitlab.bakery.com/extra-component
```




▼  repo

▼  base

 backend.yaml

 database.yaml

 frontend.yaml

 fs.yaml

 kustomization.yaml

- ▼  repo
 - ▼  base
 -  backend.yaml
 -  database.yaml
 -  frontend.yaml
 -  fs.yaml
 -  kustomization.yaml
 - ▼  overlays
 - ▼  dev
 -  kustomization.yaml
 - ▼  prod
 -  kustomization.yaml

- ▼ repo
 - ▼ base
 - backend.yaml
 - database.yaml
 - frontend.yaml
 - fs.yaml
 - kustomization.yaml**
 - ▼ overlays
 - ▼ dev
 - kustomization.yaml
 - ▼ prod
 - kustomization.yaml

```
# base/kustomization.yaml
```

```
apiVersion: kustomize.config.k8s.io/v1beta1
```

```
kind: Kustomization
```

```
resources:
```

- backend.yaml
- database.yaml
- frontend.yaml
- fs.yaml

```
configMapGenerator:
```

- name: database
- ```
 literals:
```
- url=jdbc:postgresql://database:5432/bakery



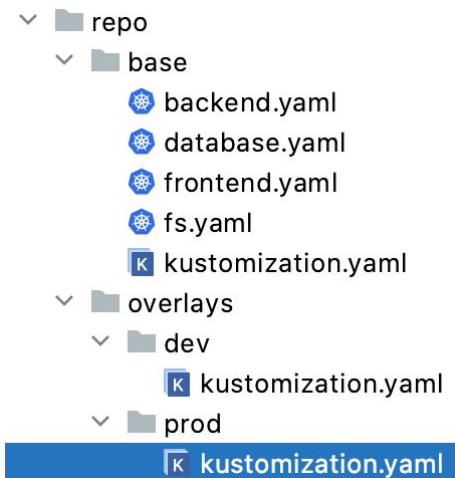
- ▼ repo
  - ▼ base
    - backend.yaml
    - database.yaml
    - frontend.yaml
    - fs.yaml
    - kustomization.yaml
  - overlays
    - ▼ dev
      - kustomization.yaml
    - prod
      - kustomization.yaml

```
overlays/dev/kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
resources:
- ../../base/
```

```
configMapGenerator:
- name: database
 behavior: merge
 literals:
 - username="backend-dev-user"
```

```
secretGenerator:
- name: database
 literals:
 - password="YyWDiGjY"
```



```
overlays/prod/kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
resources:
- ../../base/
```

```
configMapGenerator:
- name: database
 behavior: merge
 literals:
 - username="backend-prod-user"
```

```
secretGenerator:
- name: database
 literals:
 - password="J9EtVV4K"
```

- ▼ repo
  - ▼ base
    - kustomization.yaml**
  - ▼ overlays
    - ▼ dev
      - kustomization.yaml
    - ▼ prod
      - kustomization.yaml

```
base/kustomization.yaml
```

```
apiVersion: kustomize.config.k8s.io/v1beta1
```

```
kind: Kustomization
```

```
resources:
```

```
- gitlab.bakery.com/ops/base?ref=v1.2.3
```

```
configMapGenerator:
```

```
- name: database
```

```
 literals:
```

```
- url=jdbc:postgresql://database:5432/bakery
```





- ▼ repo
  - ▼ base
    - backend.yaml
    - database.yaml
    - frontend.yaml
    - fs.yaml
    - kustomization.yaml
  - ▼ overlays
    - ▼ dev
      - ▼ backend
        - log\_as\_text.yaml
        - kustomization.yaml
    - ▼ prod
      - ▼ backend
        - log\_as\_json.yaml
        - kustomization.yaml

```
overlays/dev/backend/log_as_text.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
 name: backend
spec:
 template:
 spec:
 containers:
 - name: backend
 env:
 - name: LOG_FORMAT
 value: text
```

- ▼ repo
  - ▼ base
    - backend.yaml
    - database.yaml
    - frontend.yaml
    - fs.yaml
    - kustomization.yaml
  - overlays
    - ▼ dev
      - ▼ backend
        - log\_as\_text.yaml
      - kustomization.yaml
    - ▼ prod
      - ▼ backend
        - log\_as\_json.yaml
      - kustomization.yaml

```
overlays/dev/kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
resources:
- ../../base/
```

```
patchesStrategicMerge:
- backend/log_as_text.yaml
```

```
...
```

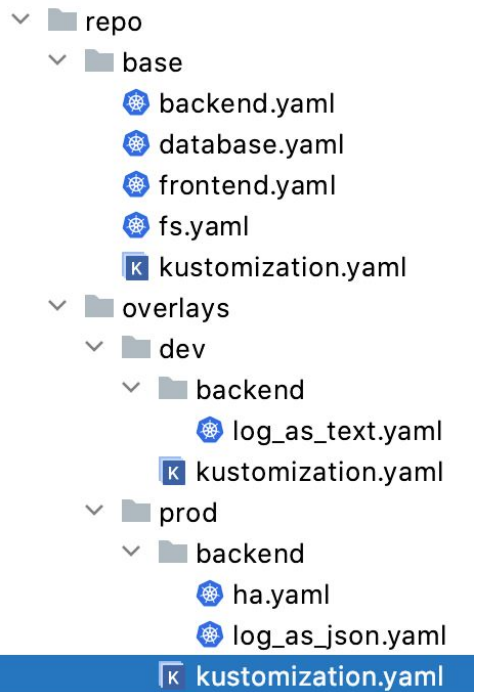
```
$ kubectl apply -k repo/overlays/dev/
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
 labels:
 ...
 name: backend
spec:
 selector:
 ...
 template:
 ...
 spec:
 containers:
 - env:
 - name: LOG_FORMAT
 value: text
 - name: DATABASE_URL
 valueFrom:
 configMapKeyRef:
 key: url
 name: database-7mt876452m
 - name: DATABASE_USERNAME
 valueFrom:
 configMapKeyRef:
 key: username
 name: database-7mt876452m
 - ...
 image: docker.bakery.com/backend
 name: backend
```



- ▼ repo
  - ▼ base
    - ⚙️ backend.yaml
    - ⚙️ database.yaml
    - ⚙️ frontend.yaml
    - ⚙️ fs.yaml
    - 📄 kustomization.yaml
  - ▼ overlays
    - ▼ dev
      - ▼ backend
        - ⚙️ log\_as\_text.yaml
        - 📄 kustomization.yaml
    - ▼ prod
      - ▼ backend
        - ⚙️ ha.yaml
        - ⚙️ log\_as\_json.yaml
        - 📄 kustomization.yaml

```
overlays/prod/backend/ha.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
 name: backend
spec:
 template:
 spec:
 affinity:
 podAntiAffinity:
 requiredDuringSchedulingIgnoredDuringExecution:
 - labelSelector:
 matchExpressions:
 - key: app
 operator: In
 values:
 - backend
 topologyKey: topology.kubernetes.io/zone
```



```
overlays/prod/kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
resources:
- ../../base/
```

```
patchesStrategicMerge:
- backend/ha.yaml
- backend/log_as_json.yaml
```

```
...
```

```
$ kubectl apply -k repo/overlays/prod/
```

```
...
apiVersion: apps/v1
kind: Deployment
metadata:
 labels:
 app: backend
 name: backend
spec:
 selector:
 ...
 template:
 metadata:
 labels:
 app: backend
 spec:
 affinity:
 podAntiAffinity:
 requiredDuringSchedulingIgnoredDuringExecution:
 - labelSelector:
 matchExpressions:
 - key: app
 operator: In
 values:
 - backend
 topologyKey: topology.kubernetes.io/zone
 containers:
 - env:
 - name: LOG_FORMAT
 value: json
 ...
```





- ▼ repo
  - ▼ base
    - ⚙️ backend.yaml
    - ⚙️ database.yaml
    - ⚙️ frontend.yaml
    - ⚙️ fs.yaml
    - Ⓚ kustomization.yaml
  - ▼ overlays
    - ▼ dev
      - ▼ backend
        - ⚙️ log\_as\_text.yaml
      - ▼ frontend
        - 📄 ingress\_host.yaml
        - Ⓚ kustomization.yaml
    - > prod

```
overlays/dev/frontend/ingress_host.yaml
- op: replace
 path: /spec/rules/0/host
 value: dev.api.bakery.com
```

- ▼  repo
  - ▼  base
    -  backend.yaml
    -  database.yaml
    -  frontend.yaml
    -  fs.yaml
    -  kustomization.yaml
  - ▼  overlays
    - ▼  dev
      - ▼  backend
        -  log\_as\_text.yaml
      - ▼  frontend
        -  ingress\_host.yaml
    -  kustomization.yaml
  - >  prod

```
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
resources:
- ../../base/
```

```
patchesStrategicMerge:
- backend/log_as_text.yaml
```

```
patches:
- path: frontend/ingress_host.yaml
 target:
 group: networking.k8s.io
 version: v1
 kind: Ingress
 name: frontend
```

...

```
$ kubectl apply -k repo/overlays/dev/
```

```
...
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
 labels:
 app: frontend
 module: frontend
 name: frontend
spec:
 rules:
 - host: dev.api.bakery.com
 http:
 paths:
 - backend:
 service:
 name: frontend
 port:
 number: 80
```

...





- ▼  repo
  - >  base
  - ▼  overlays
    - >  google\_cloud
    - ▼  on-prem
      - >  base
      - ▼  overlays
        - >  site\_a
        - >  site\_b
        - >  site\_c
    - >  scaleway

- ▼ repo
  - > base
  - ▼ overlays
    - ▼ google\_cloud
      - > base
      - ▼ overlays
        - > int
        - > prod
    - ▼ on-prem
      - > base
      - ▼ overlays
        - ▼ site\_a
          - > base
          - ▼ overlays
            - > int
            - > prod
        - ▼ site\_b
          - > base
          - ▼ overlays
            - > int
            - > prod
        - ▼ site\_c
          - > base
          - ▼ overlays
            - > int
            - > prod
    - ▼ scaleway
      - > base
      - ▼ overlays
        - > int
        - > prod

- ▼ repo
  - > base
  - ▼ overlays
    - ▼ google\_cloud
      - ▼ base
        - ▼ backend
          - log\_format\_gcp.yaml
          - kustomization.yaml
        - overlays
          - int
            - kustomization.yaml
          - prod
      - on-prem
        - > site\_a
        - > site\_b
      - ▼ scaleway
        - > base
        - ▼ overlays
          - > int
          - > prod

```
#overlays/google_cloud/base/backend/log_format_gcp.yaml
```

```
apiVersion: apps/v1
```

```
kind: Deployment
```

```
metadata:
```

```
 name: backend
```

```
spec:
```

```
 template:
```

```
 spec:
```

```
 containers:
```

```
 - name: backend
```

```
 env:
```

```
 - name: LOG_FORMAT
```

```
 value: gcp
```

- ▼ repo
  - > base
  - ▼ overlays
    - ▼ google\_cloud
      - ▼ base
        - ▼ backend
          - ⚙️ log\_format\_gcp.yaml
          - kustomization.yaml**
    - ▼ overlays
      - ▼ int
        - kustomization.yaml**
      - > prod
  - ▼ on-prem
    - > site\_a
    - > site\_b
  - ▼ scaleway
    - > base
    - ▼ overlays
      - > int
      - > prod

```
#overlays/google_cloud/base/kustomization.yaml
```

```
apiVersion: kustomize.config.k8s.io/v1beta1
```

```
kind: Kustomization
```

```
resources:
```

```
- ../../../../base/
```

```
patchesStrategicMerge:
```

```
- backend/log_format_gcp.yaml
```



- ▼ repo
  - > base
  - ▼ overlays
    - ▼ google\_cloud
      - ▼ base
        - ▼ backend
          - ⚙️ log\_format\_gcp.yaml
          - 📄 kustomization.yaml
        - ▼ overlays
          - ▼ int
            - 📄 kustomization.yaml
    - > prod
  - ▼ on-prem
    - > site\_a
    - > site\_b
  - ▼ scaleway
    - > base
    - ▼ overlays
      - > int
      - > prod

```
#overlays/google_cloud/overlays/int/kustomization.yaml
```

```
apiVersion: kustomize.config.k8s.io/v1beta1
```

```
kind: Kustomization
```

```
resources:
```

```
- ../../base
```

```
configMapGenerator:
```

```
- name: database
```

```
behavior: merge
```

```
literals:
```

```
- username="backend-int-user"
```

```
secretGenerator:
```

```
- name: database
```

```
literals:
```

```
- password="0to70rdN"
```

- ▼  repo
  - >  base
  - ▼  overlays
    - ▼  int
      - >  base
      - ▼  overlays
        - >  google\_cloud
        - >  on-prem
        - >  scaleway
    - ▼  prod
      - >  base
      - ▼  overlays
        - >  google\_cloud
        - >  on-prem
        - >  scaleway



- ▼ repo
  - > base
  - ▼ overlays
    - ▼ google\_cloud
      - > base
      - > overlays
    - ▼ on-prem
      - > base
      - ▼ overlays
        - ▼ site\_a
          - ▼ base
            - ▼ backend
              - auth\_with\_openldap.yaml
              - kustomization.yaml
              - openldap.yaml
            - > overlays
          - ▼ site\_b
            - ▼ base
              - kustomization.yaml
            - > overlays
          - ▼ site\_c
            - ▼ base
              - ▼ backend
                - auth\_with\_openldap.yaml
                - kustomization.yaml
                - openldap.yaml
              - > overlays
      - ▼ scaleway
        - > base
        - > overlays





- ▼ repo
  - ▼ base
    - ⚙ backend.yaml
    - ▼ components
      - ▼ openldap
        - ▼ backend
          - ⚙ auth\_with\_openldap.yaml
          - kustomization.yaml**
          - ⚙ openldap.yaml
        - ⚙ database.yaml
        - ⚙ frontend.yaml
        - ⚙ fs.yaml
        - k** kustomization.yaml
  - > overlays

```
base/components/openldap/kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1alpha1
kind: Component

resources:
- openldap.yaml

patchesStrategicMerge:
- backend/auth_with_openldap.yaml
```

- ▼ repo
  - ▼ base
    - ⚙️ backend.yaml
    - ▼ components
      - ▼ openldap
        - ▼ backend
          - ⚙️ auth\_with\_openldap.yaml
          - 📄 kustomization.yaml
          - ⚙️ openldap.yaml
        - ⚙️ database.yaml
        - ⚙️ frontend.yaml
        - ⚙️ fs.yaml
        - 📄 kustomization.yaml
      - ▼ overlays
        - > google\_cloud
        - ▼ on-prem
          - > base
          - ▼ overlays
            - ▼ site\_a
              - ▼ base
                - 📄 kustomization.yaml
          - > site\_b
          - > site\_c
        - > scaleway

```

overlays/on-prem/overlays/site_a/base/kustomizat
ion.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization

resources:
- ../../../../base

components:
- ../../../../base/components/openldap
```



# GO



```
repo/overlays/dev/kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

```
...

generators:
- sops.secret.enc.yaml
```

```
repo/overlays/dev/sops.secret.enc.yaml
apiVersion: k8s.bakery.com/v1
kind: SopsSecret
metadata:
 name: database
data:
 password:
ENC[AES256_GCM,data:x3ZhXnPrdJ6D+6wF0BmV
spbJaYmgD9u6ZSU/mUztq4zu0vdX4BmRozVwvps=
,iv:WCnyc/9gjnVKucgIWPDNwLX0KQ+k2s54xJxK
mAfbRSw=,tag:pPbdw7DC0PReoa9HU7k5AQ==,ty
pe:str]
sops:
```

```
...
```

```
apiVersion: v1
kind: Secret
metadata:
 name: database
data:
 password: "Z1U5RHIwZm83WkN...Q4em9GdTgK"
```



```
repo/overlays/dev/kustomization.yaml
apiVersion: kustomize.config.k8s.io/v1beta1
kind: Kustomization
```

The diagram illustrates a Kustomization workflow. A central Kustomization resource (top) points via arrows to two target resources. The left target is a Secret resource (bottom-left), and the right target is a transformed Secret resource (bottom-right). The Kustomization resource lists the Secret and a transformer as its resources.

```
resources:
- sops.secret.enc.yaml

transformers:
- sops-transformer.yaml
```

```
repo/overlays/dev/sops.secret.enc.yaml
apiVersion: v1
kind: Secret
metadata:
 name: database
data:
 password:
ENC[AES256_GCM,data:x3ZhXnPrdJ6D+6wF0BmV
spbJaYmgD9u6ZSU/mUztq4zu0vdX4BmRozVwvps=
,iv:WCnyc/9gjnVKucgIWPdNwLX0KQ+k2s54xJxK
mAfbRSw=,tag:pPbdw7DC0PReoa9HU7k5AQ==,ty
pe:str]
sops:
```

```
apiVersion: v1
kind: Secret
metadata:
 name: database
data:
 password: "Z1U5RHIwZm83WkN...Q4em9GdTgK"
```





Google  
Developer Expert



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Gitlab Heroes





 **@davinkevin**

***Question(s) ?***

