

**DATE : 21.04.2025**

**DT/NT : DT**

**LESSON : KUBERNETES**

**SUBJECT: SECRET-CONFIGMAP**

**BATCH : B 303**

**AWS-DEVOPS**



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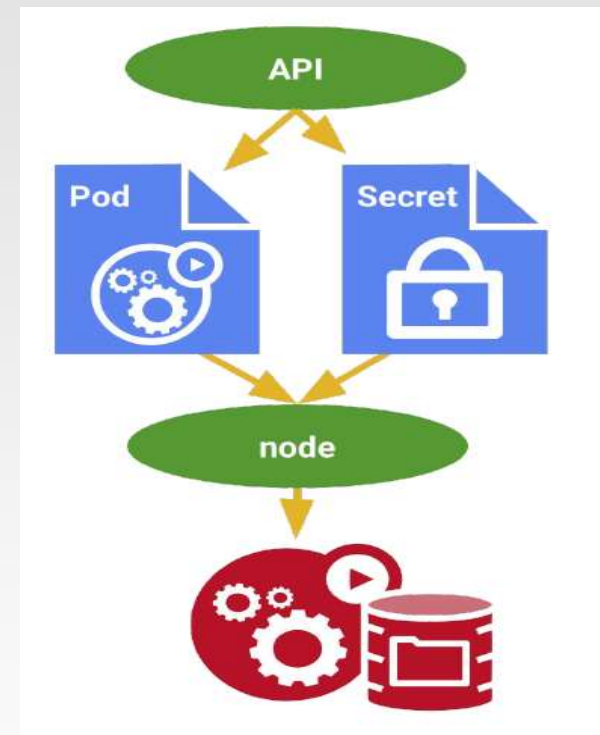
- ❖ Secrets
- ❖ ConfigMaps

## Why env exist?

```
1  API_KEY="XXX_YYY"  
2  PASSWORD="mypassword"  
3  HOST="111.121.130.17"  
4  PORT="3360"  
5  DATABASE="mydb"  
6  USER="Mickey"
```

# Secrets

A **Secret** is an object that contains a small amount of sensitive data such as a password, a token, or a key. Such information might otherwise be put in a Pod specification or in an image.



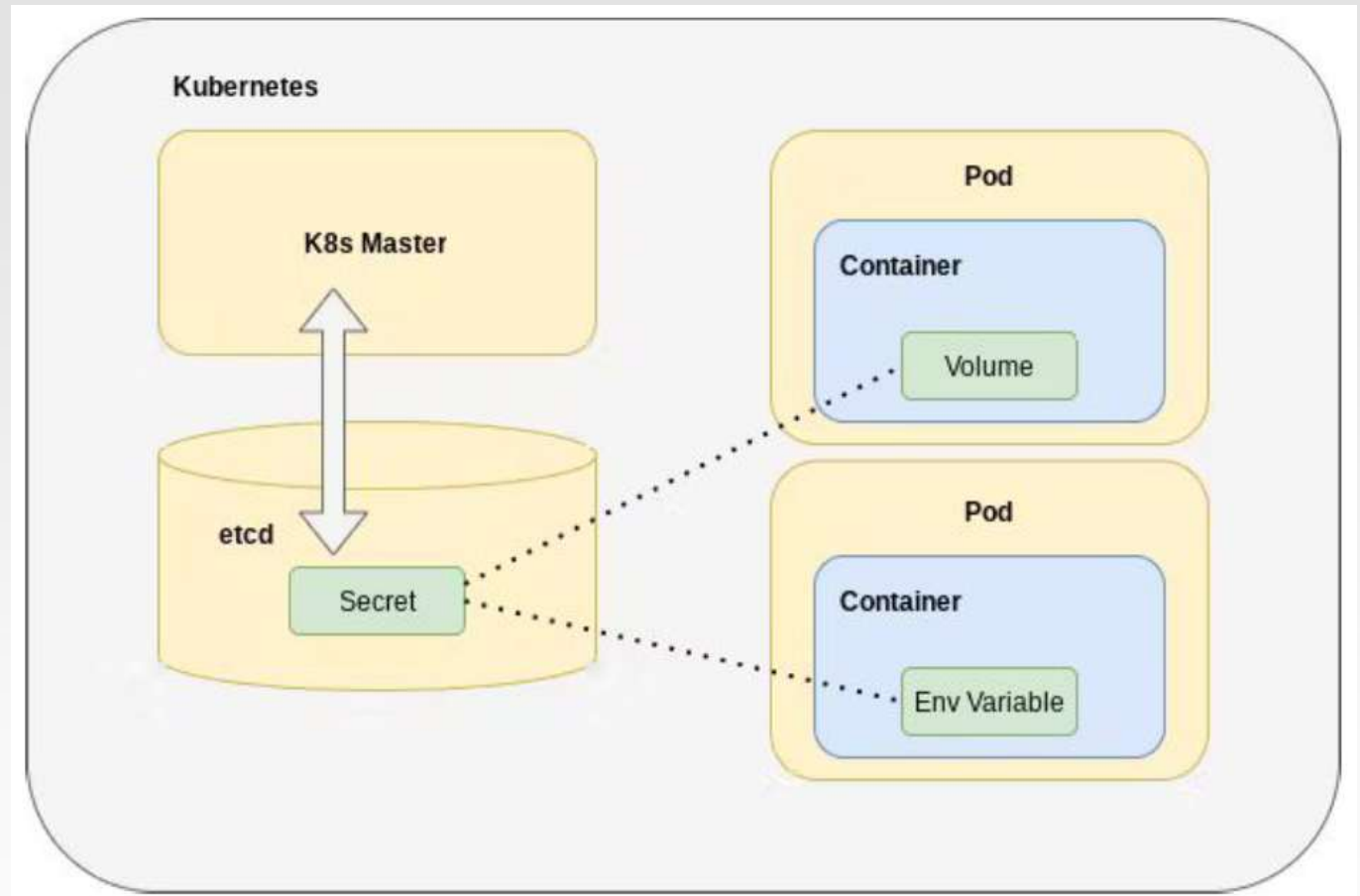
# Secrets

**Opaque** is the default Secret type if omitted from a Secret configuration file. When you create a Secret using `kubectl`, you will use the **generic** subcommand to indicate an Opaque Secret type.

Built-in Type	Usage
Opaque	arbitrary user-defined data
<code>kubernetes.io/service-account-token</code>	ServiceAccount token
<code>kubernetes.io/dockercfg</code>	serialized <code>~/.dockercfg</code> file
<code>kubernetes.io/dockerconfigjson</code>	serialized <code>~/.docker/config.json</code> file
<code>kubernetes.io/basic-auth</code>	credentials for basic authentication
<code>kubernetes.io/ssh-auth</code>	credentials for SSH authentication
<code>kubernetes.io/tls</code>	data for a TLS client or server
<code>bootstrap.kubernetes.io/token</code>	bootstrap token data

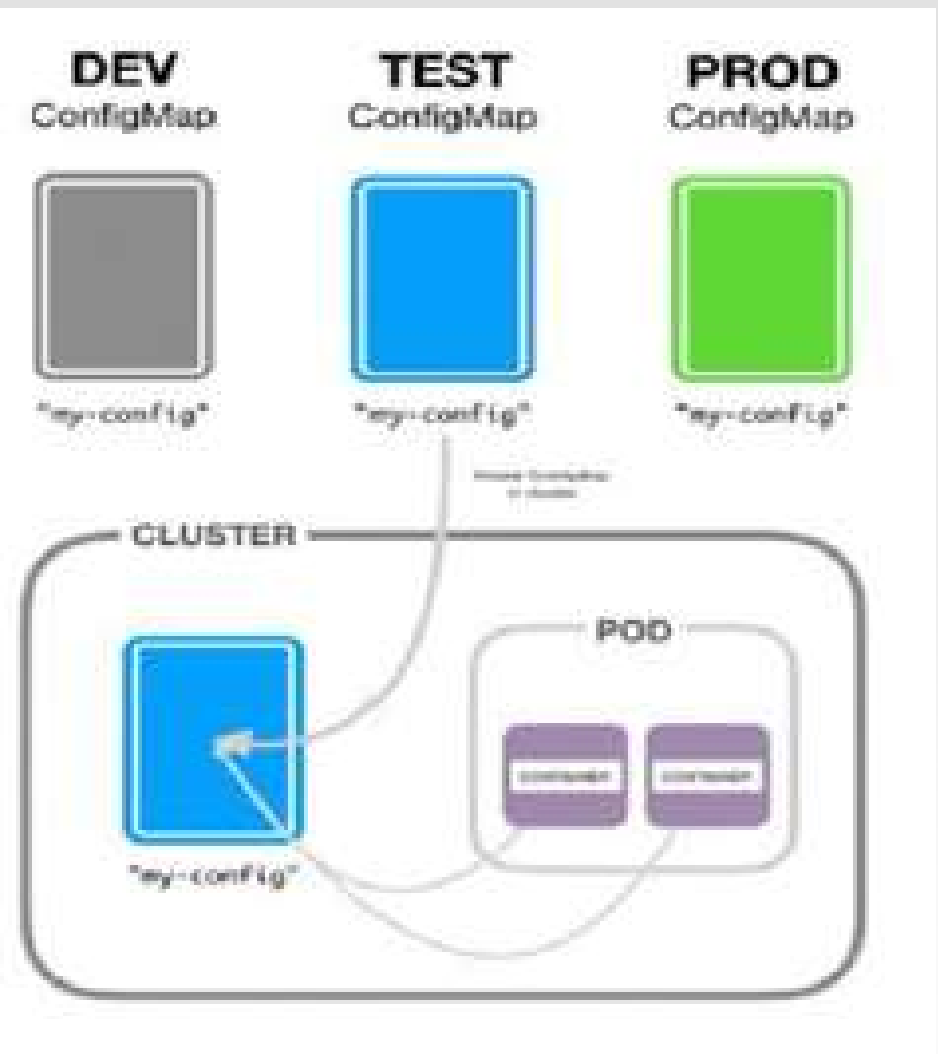
# Secrets

Secrets can be mounted as data **volumes** or exposed as **environment variables** to be used by a container in a Pod.



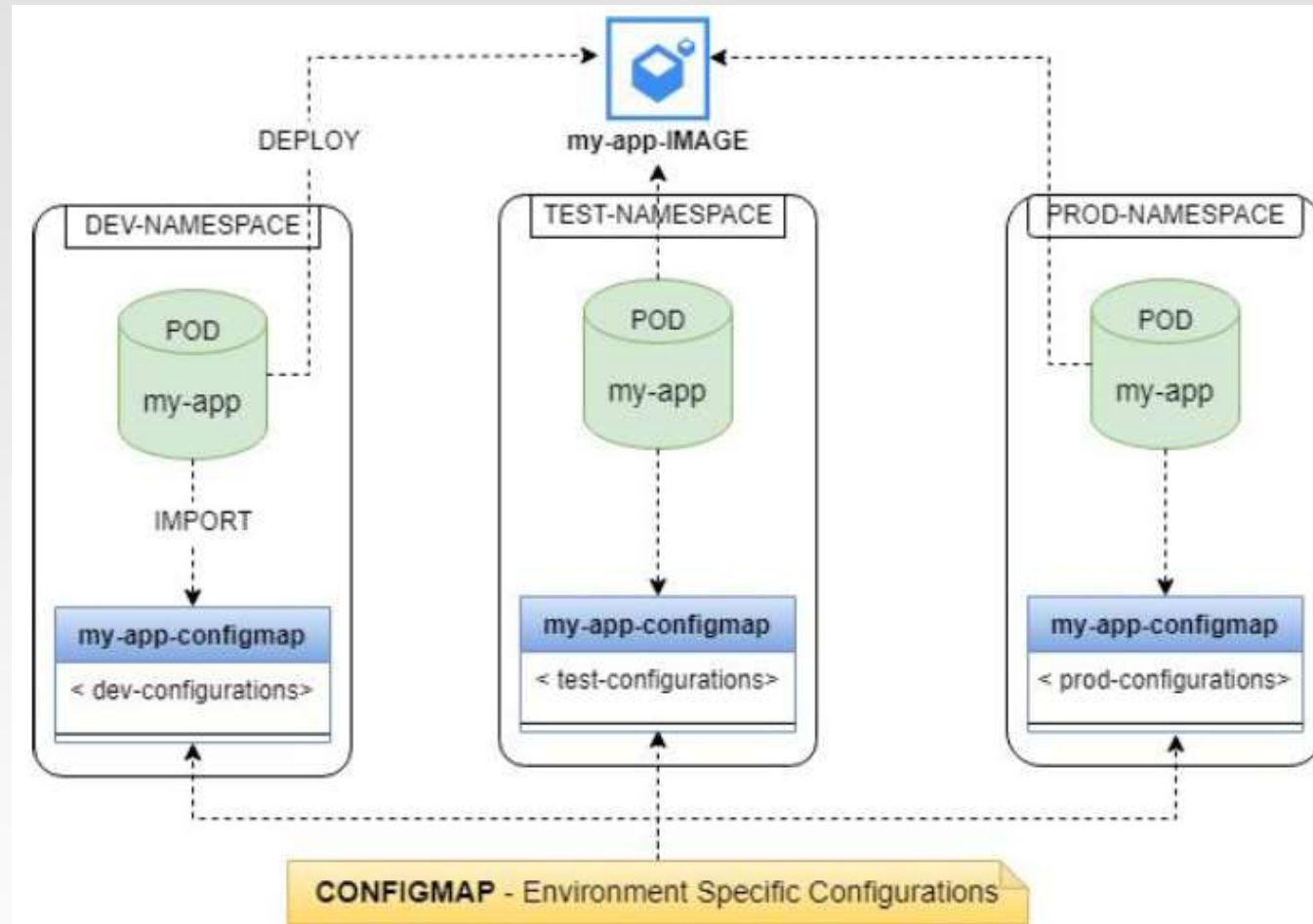
# ConfigMaps

A ConfigMap is an API object used to store non-confidential data in key-value pairs. Pods can consume ConfigMaps as environment variables, command-line arguments, or as configuration files in a volume.



# ConfigMaps

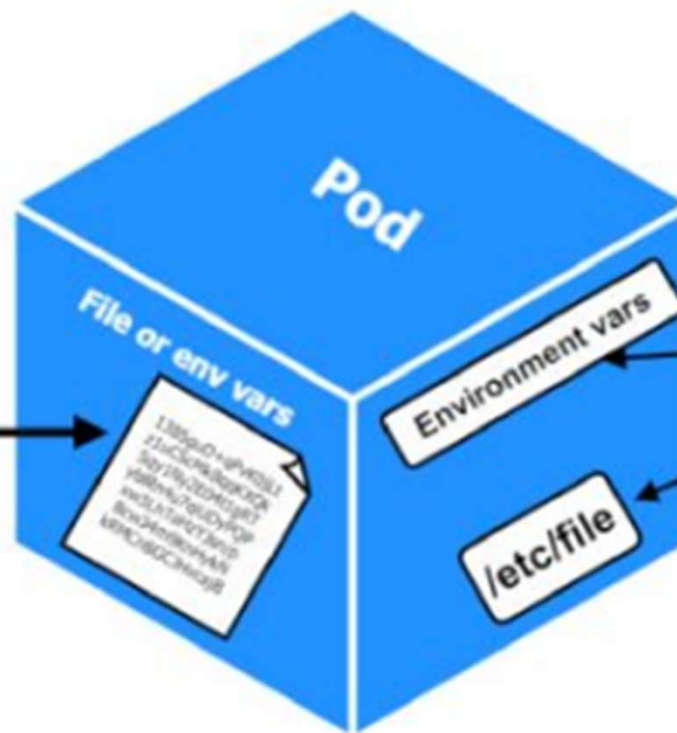
A ConfigMap allows you to **decouple environment-specific configuration** from your container images, so that your applications are easily portable.





## "Secret"

```
1385guD+qPvK0jLt  
z1uCScMk8qqKXQk  
Sqy1Ny2E04t1gRT  
yblRn4u7qiUDyPQP  
xw3LhTaHzYJsn/p  
Bcw34m9KnHykN  
kRMCn8GCJHvcajB
```



## "Config map"

```
apiVersion: v1  
kind: ConfigMap  
metadata:  
  name: special-config  
  namespace: default  
data:  
  SPECIAL_LEVEL: 5  
  NODE_ENV: staging
```

vars

or

volume

```
env:
```

- **name:** APP\_COLOR  
**value:** pink

```
env:
```

- **name:** APP\_COLOR  
**valueFrom:**  
    **configMapKeyRef:**

```
env:
```

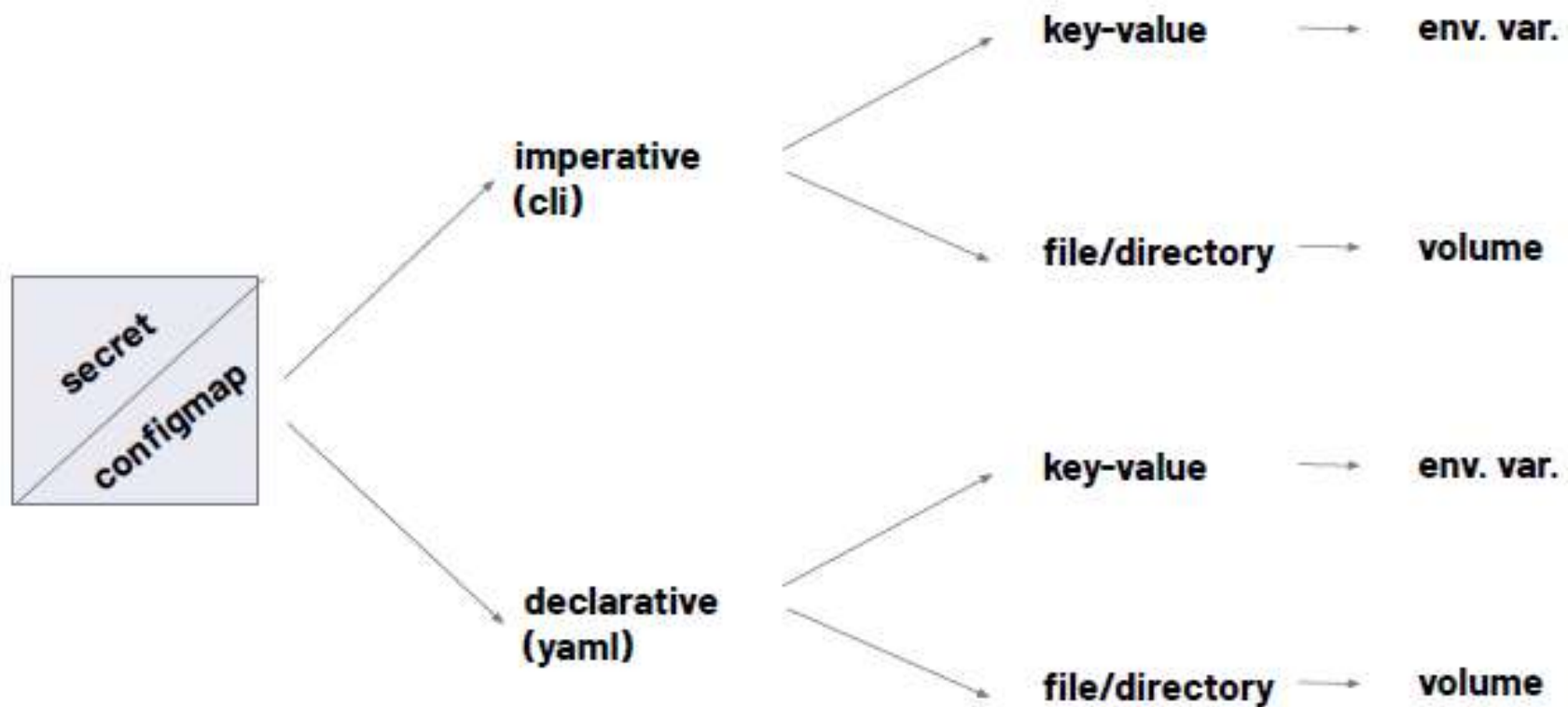
- **name:** APP\_COLOR  
**valueFrom:**  
    **secretKeyRef:**

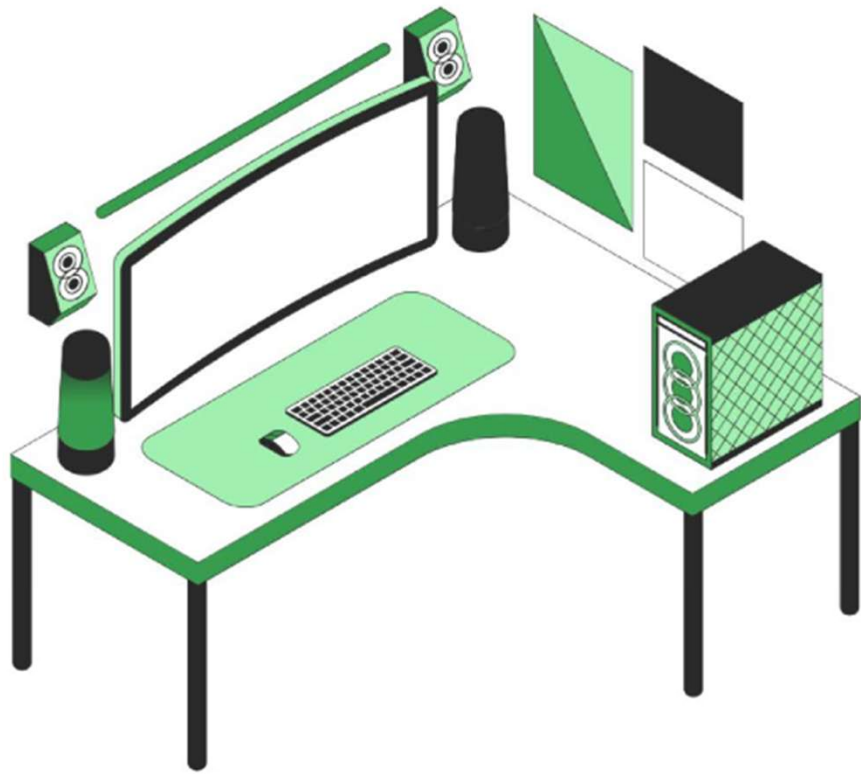
1 Plain Key Value

2 ConfigMap

3 Secrets

# Handson Workflow





# Do you have any questions?

Send it to us! We hope you learned something new.