BATCH: 149
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DT/NT : DT

LESSON : DevOps

SUBJECT: Kubernetes
(Secrets and ConfigMaps)

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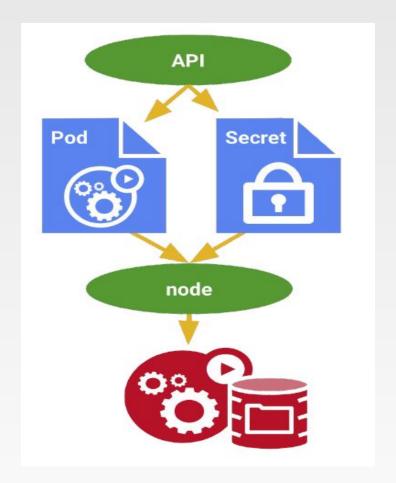
Why env exist?

```
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.
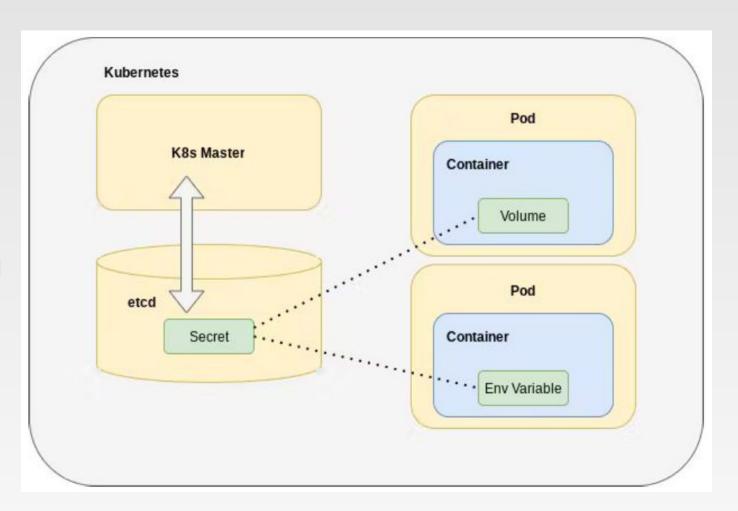
Secrets

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.

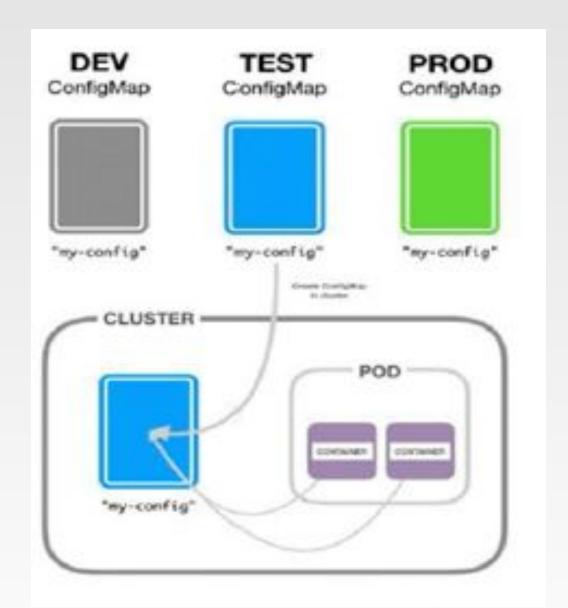| Built-in Type	Usage
Opaque	arbitrary user-defined data
kubernetes.io/service-account-token	ServiceAccount token
kubernetes.io/dockercfg	serialized ~/.dockercfg file
kubernetes.io/dockerconfigjson	serialized ~/.docker/config.json file
kubernetes.io/basic-auth	credentials for basic authentication
kubernetes.io/ssh-auth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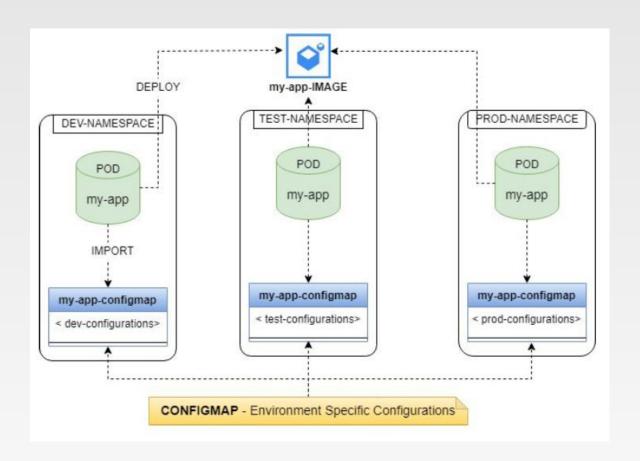

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ConfigMaps

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.
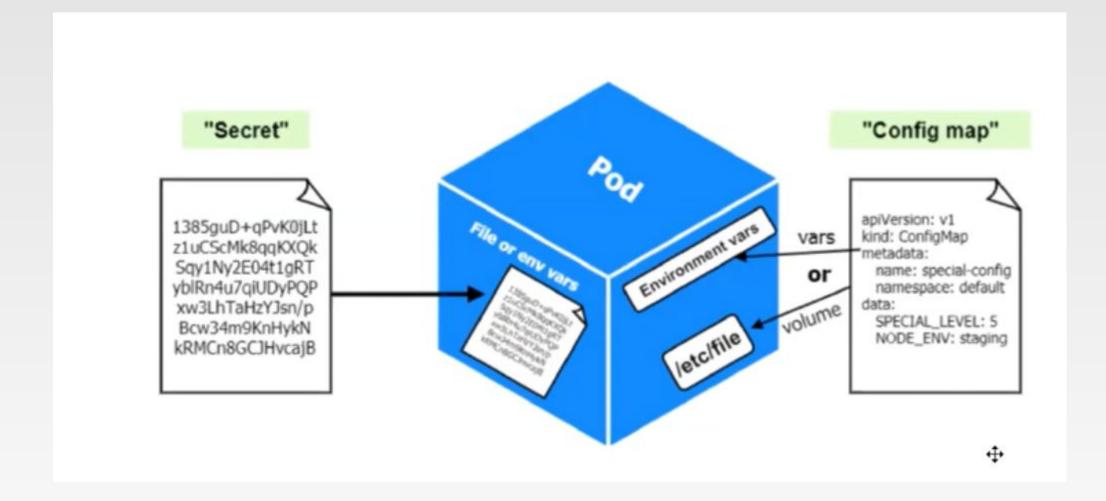
ConfigMaps

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

```
env:
  - name: APP_COLOR
    value: pink
```

```
env:
  - name: APP_COLOR
    valueFrom:
        configMapKeyRef:
```

```
env:
  - name: APP_COLOR
    valueFrom:
        secretKeyRef:
```

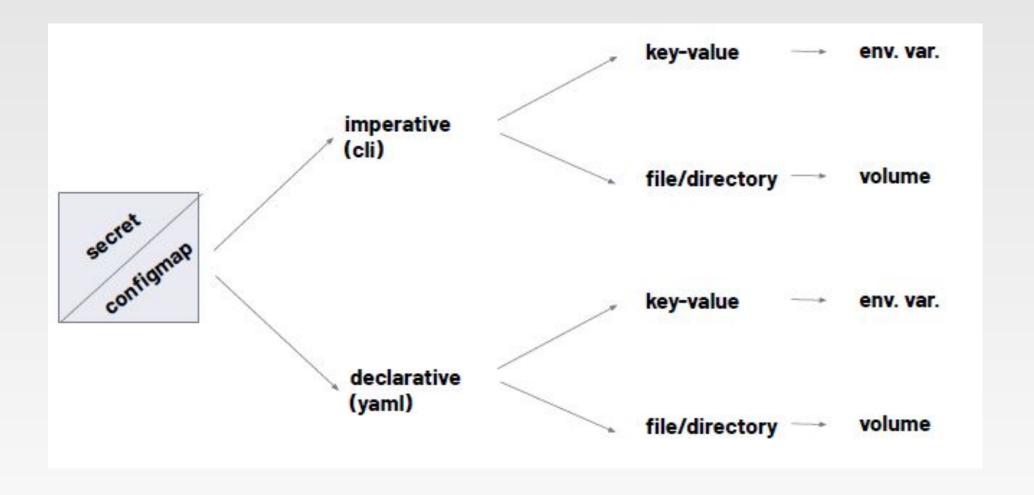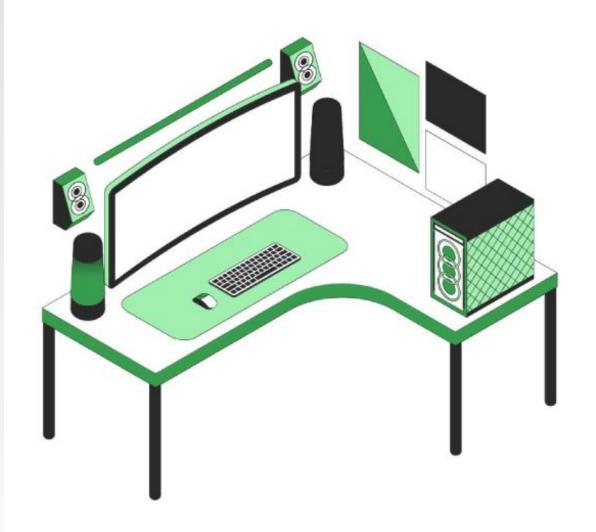1 Plain Key Value

2 ConfigMap

3 Secrets

Handson Workflow

Do you
have any
questions?

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