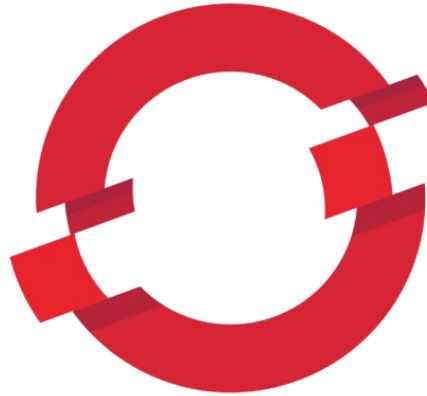


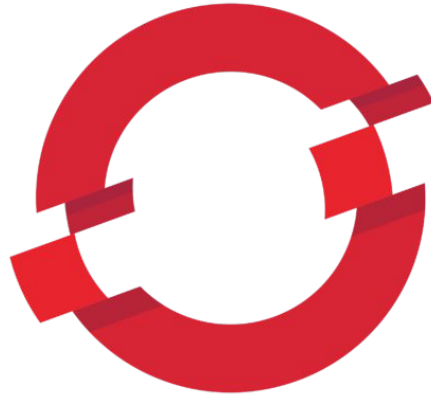
Running Invenio on Openshift

PaaS: **Easy** and **rapid** deployment and scaling of web applications



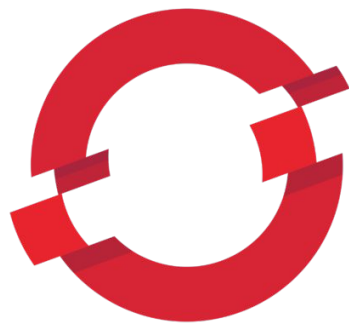
OPENSIFT

Open source distribution of Red Hat's OpenShift Online PaaS



OPENSIFT

Container Application Platform



OPENSIFT



kubernetes

OpenShift at CERN

<https://webservices.web.cern.ch/webservices/> (PaaS Web Application)

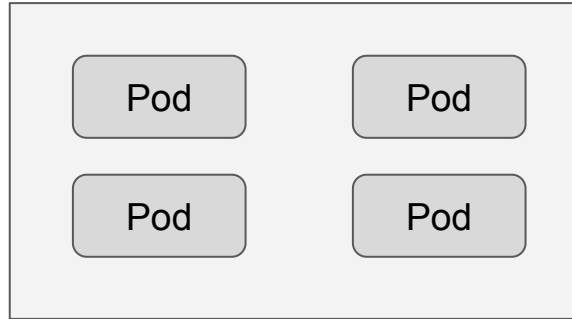
Site type → Test and Prod

[https://openshift\[-dev\].cern.ch](https://openshift[-dev].cern.ch)

Secrets
Routes
Services
ConfigMaps
BuildConfigs
Containers
Images Pods
DeploymentConfig

Pods

Pods



Pods

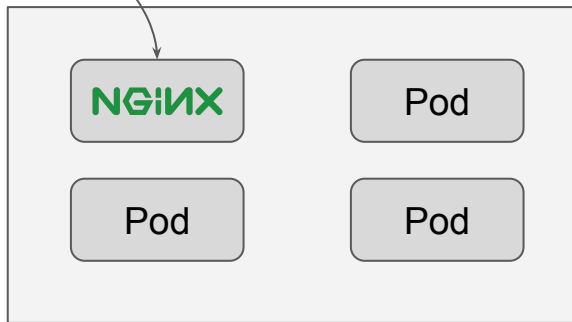


DeploymentConfig

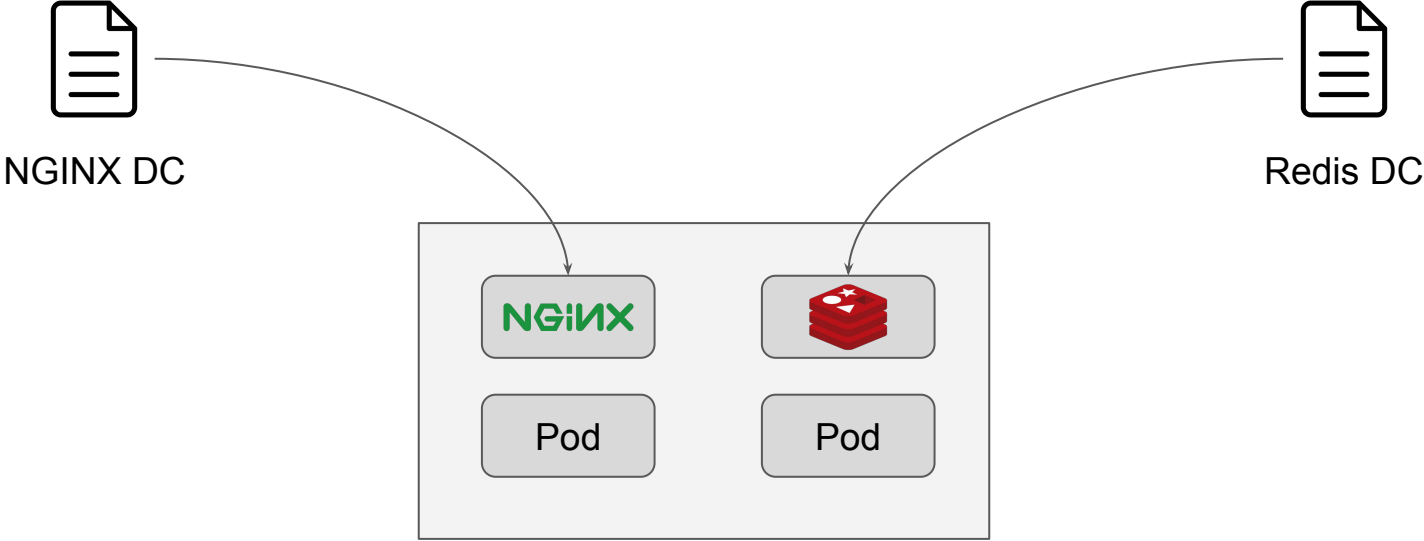
DeploymentConfig



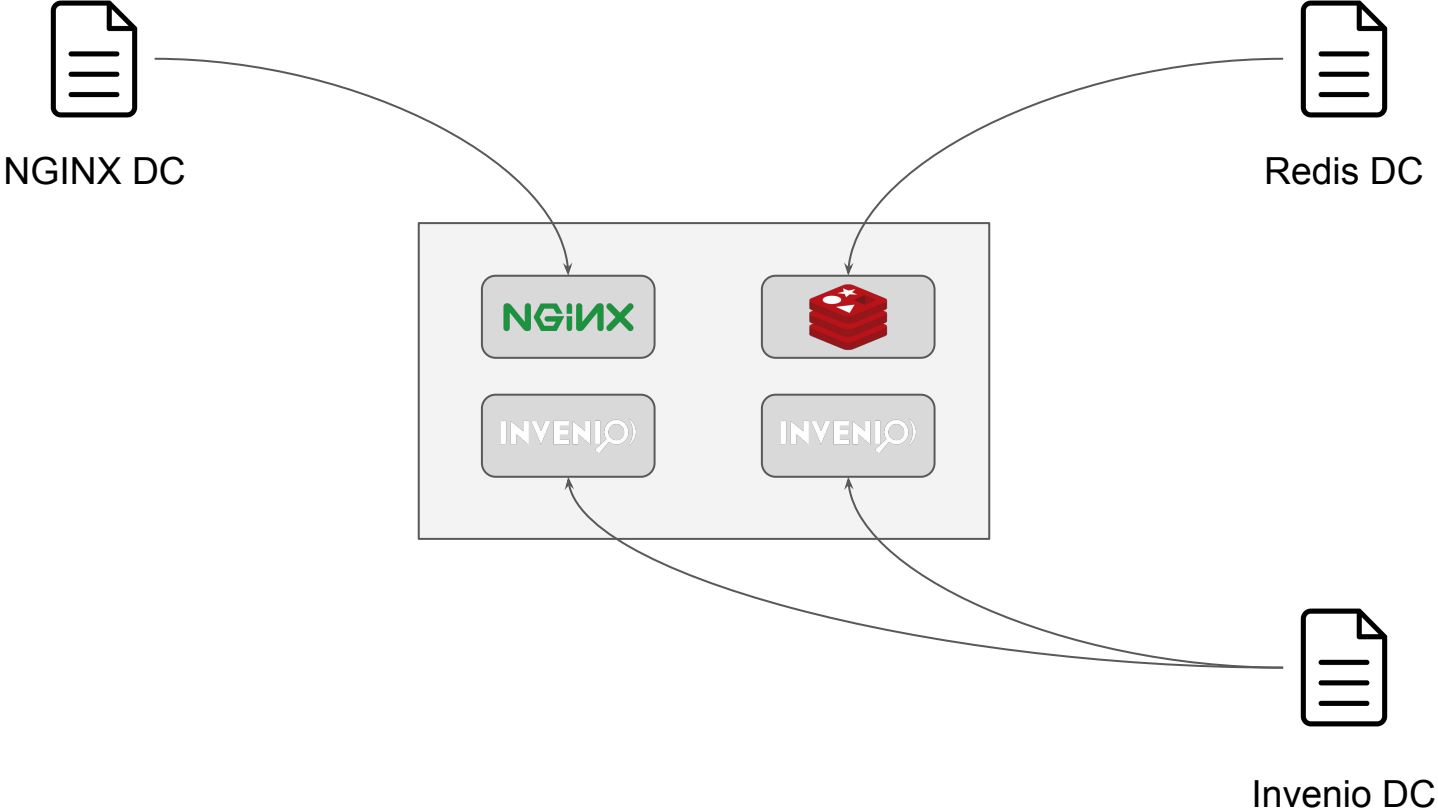
NGINX DC



DeploymentConfig

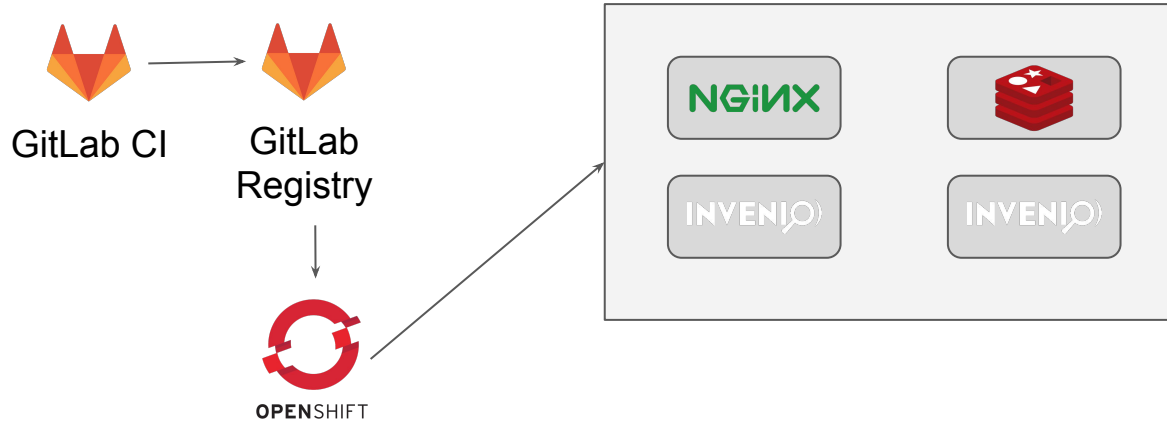


DeploymentConfig

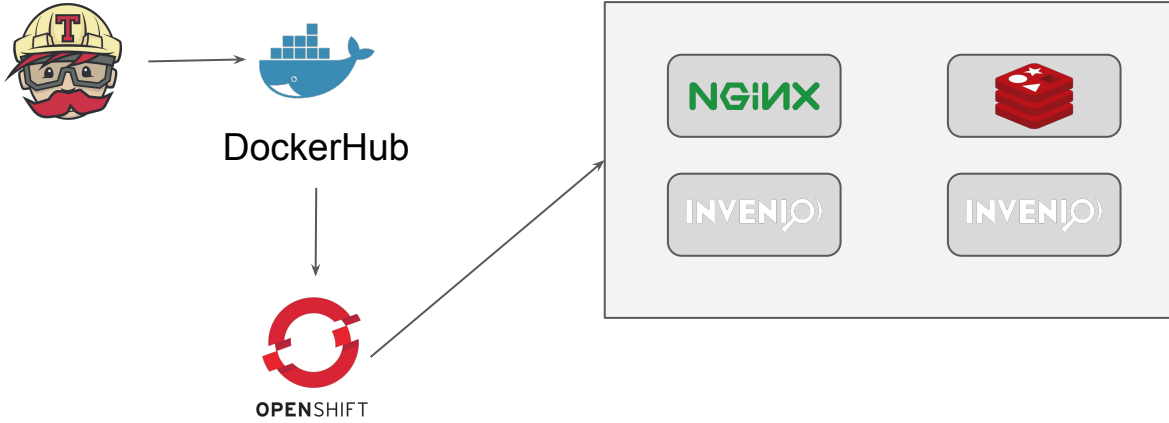


Images

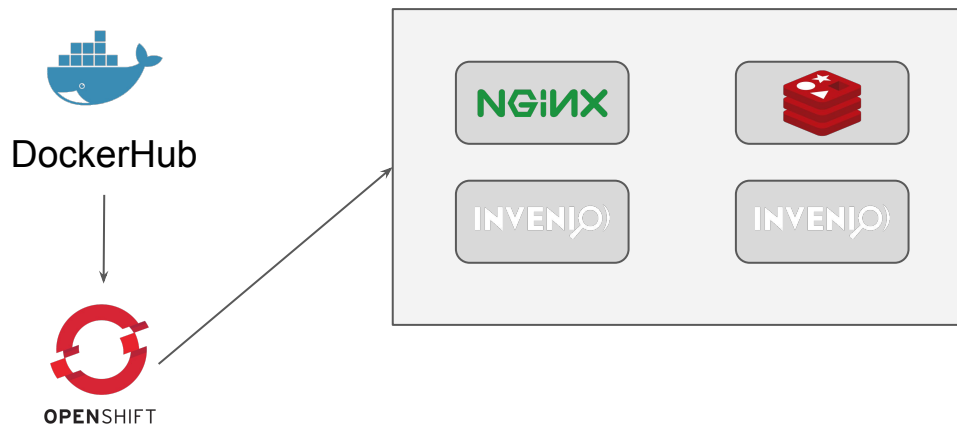
Images



Images

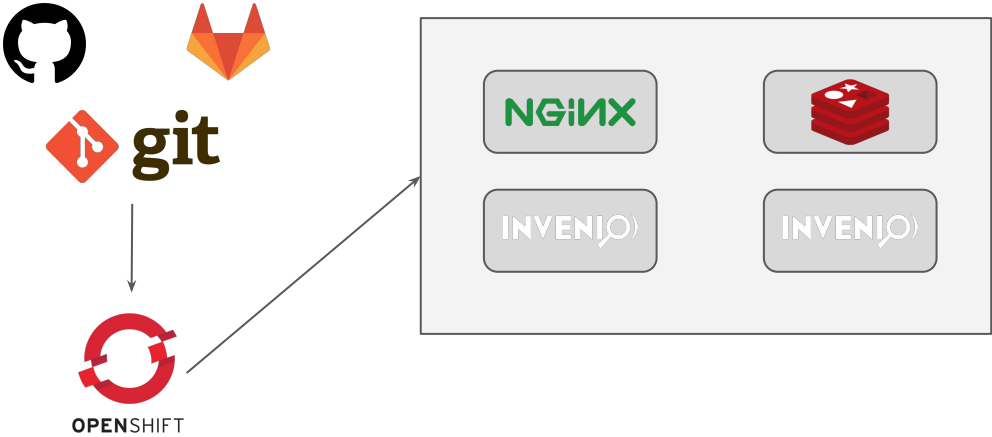


Images



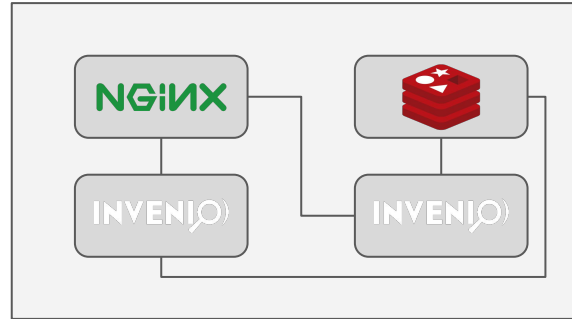
BuildConfig

BuildConfig



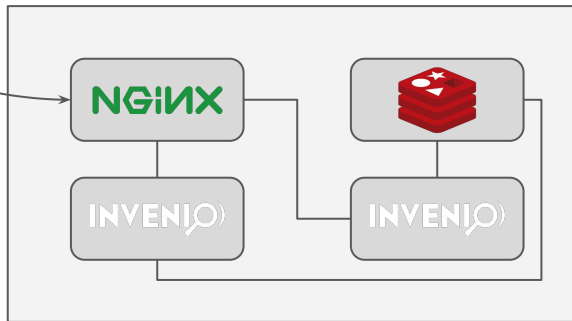
Services, Routes, ConfigMap, Secrets

Internal network

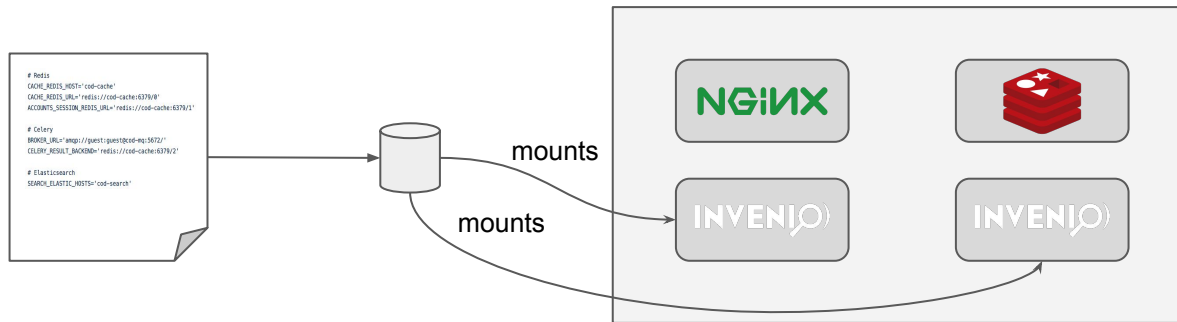


Routes

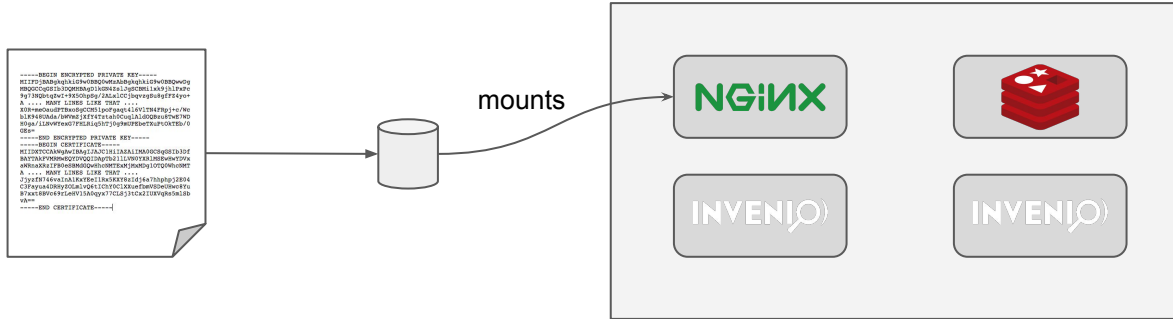
Secure <https://zenodo.org> ★



ConfigMap



Secrets



Extra concepts

- Volumes
- Quotas
- Admin access
- Monitoring
- Console
- Debugging: `oc rsh` | `oc debug`

Rollout strategies

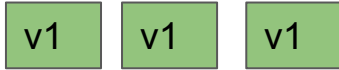
Rolling update

Recreate

Rollout strategies

Rolling update

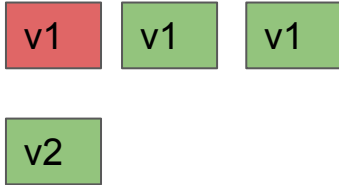
Recreate



Rollout strategies

Rolling update

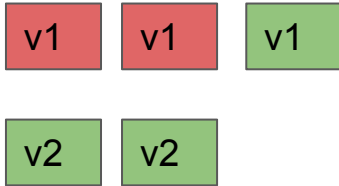
Recreate



Rollout strategies

Rolling update

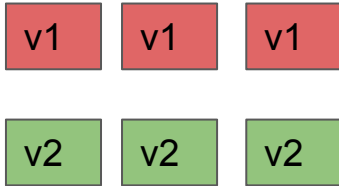
Recreate



Rollout strategies

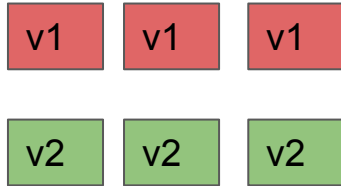
Rolling update

Recreate



Rollout strategies

Rolling update

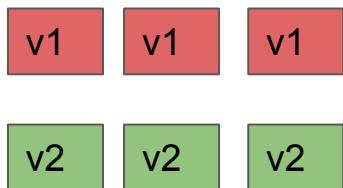


Recreate

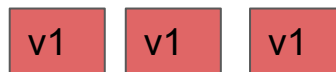


Rollout strategies

Rolling update

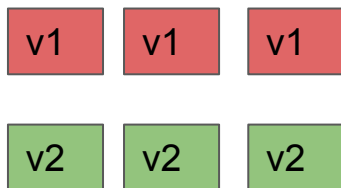


Recreate

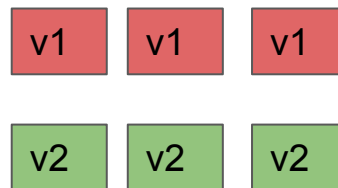


Rollout strategies

Rolling update



Recreate



kompose.io

```
kompose --file docker-compose.yml --provider openshift up
```

Questions?