



# WebLogic On Kubernetes

*Openlab open day*

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# Agenda

Introduction

Why Dockerize

Current Architecture

Oracle Kubernetes Test

Kubernetes Federation

Conclusion and plans

# Introduction

*Integration with IT Departement services*

Move WebLogic infrastructure to Docker containers

Run critical CERN applications on top of it

Keep same functionalities, QoS as VM's model

Run on the Cloud

Oracle Kubernetes

OpenStack

....

# Why Dockerize I

## Increase developer productivity :

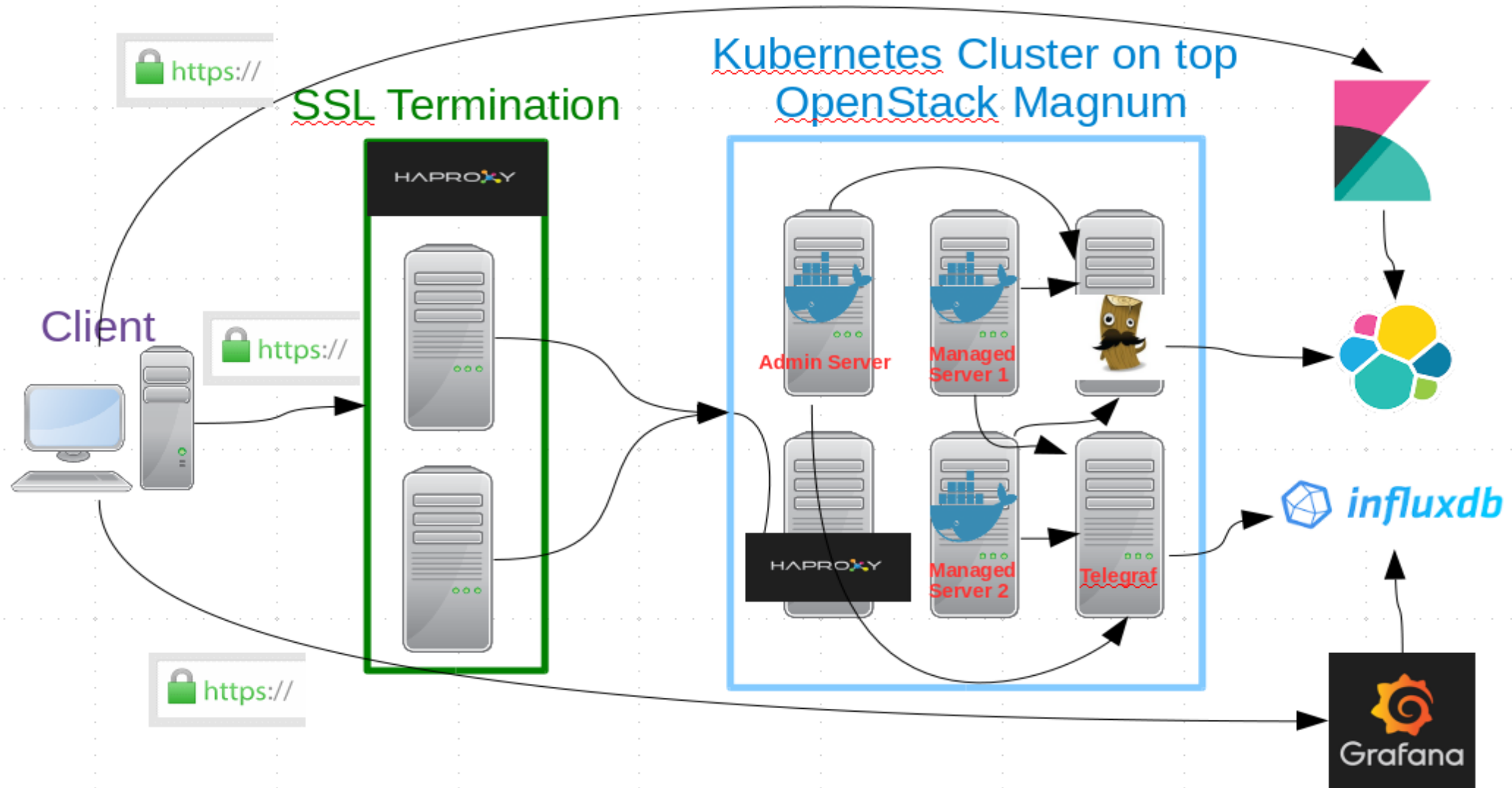
- Improve testing
- Consistent development environments

## Make operations happy :

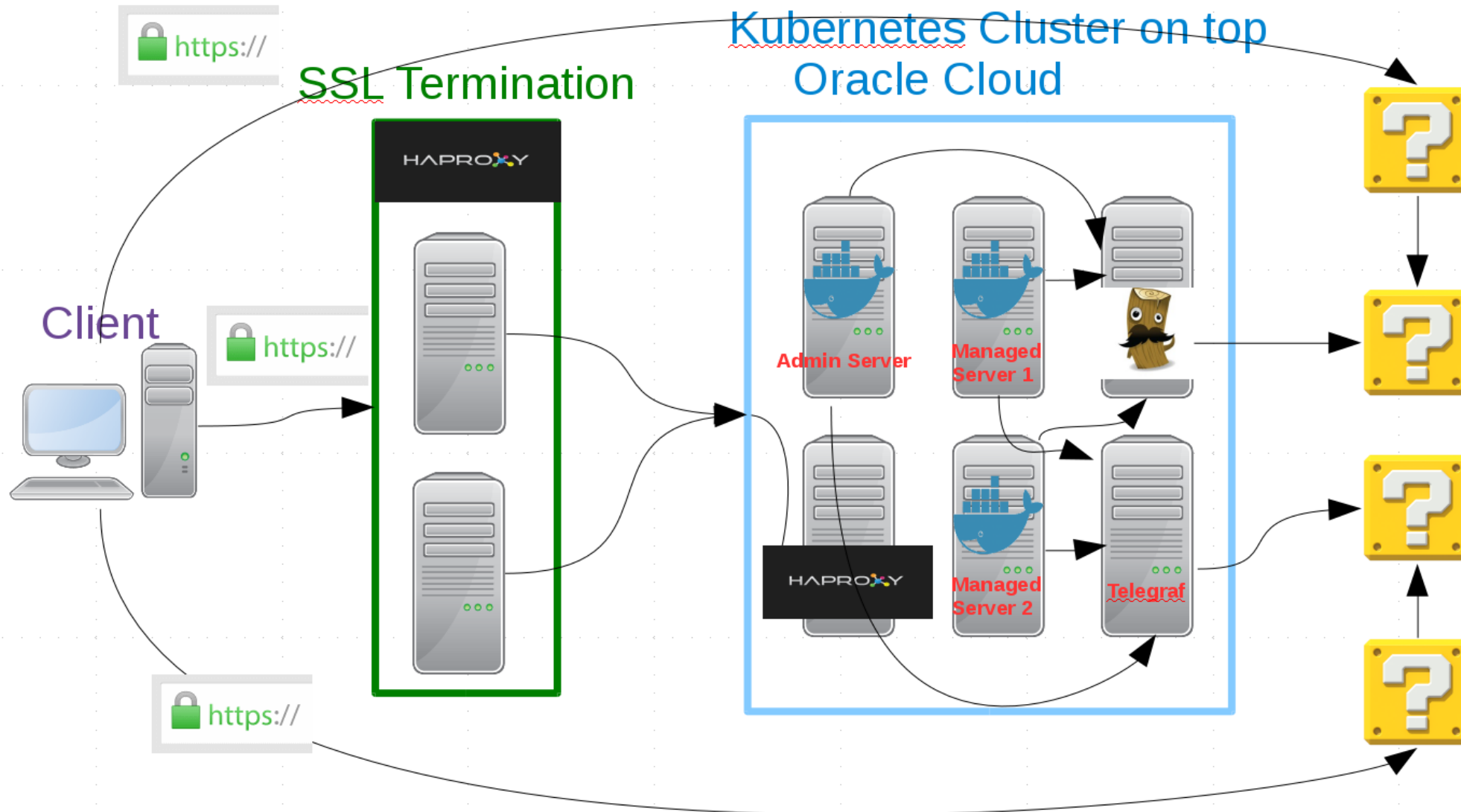
- Repeatable
- Fast to deploy
- Simplify versioning control
- Simple to maintain
- Portable



# Deployment Architecture



# Oracle Kubernetes test



# Kubernetes Federation

It works!

Nginx running.

DR solution candidate

Data replication.

Privacy.

Have a CLI client that helps you to  
configure would be great.

Thanks to **Ricardo Rocha** and **Clenimar  
Filemon** from IT-CM.

```
$ kubectl get clusters --context=fed
NAME                STATUS    AGE
clenimar-kube-c1    Ready    15d
clenimar-kube-c3    Ready    15d
gke                  Ready    2h
oracle              Ready    39s
```

```
$ k get deployments --context=oracle
NAME          DESIRED  CURRENT  UP-TO-DATE  AVAILABLE  AGE
nginx         1        1        1           1          2m
```

# Conclusion and plans

Dev & Test/Preprod for CERN developers

Production

First on premise

Later in Cloud

Try new feature from Oracle Kubernetes

Move other services to Kubernetes.





# QUESTIONS?

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