



JOURNEY TO CLOUD-NATIVE APPLICATIONS WITH OPENSHIFT

Hands-on Technical Workshop

MARTIN ÖSTMARK
Solution Architect

JOHANNES BRÄNNSTRÖM
Solution Architect

NACIM BOUKHEDIMI
Solution Architect

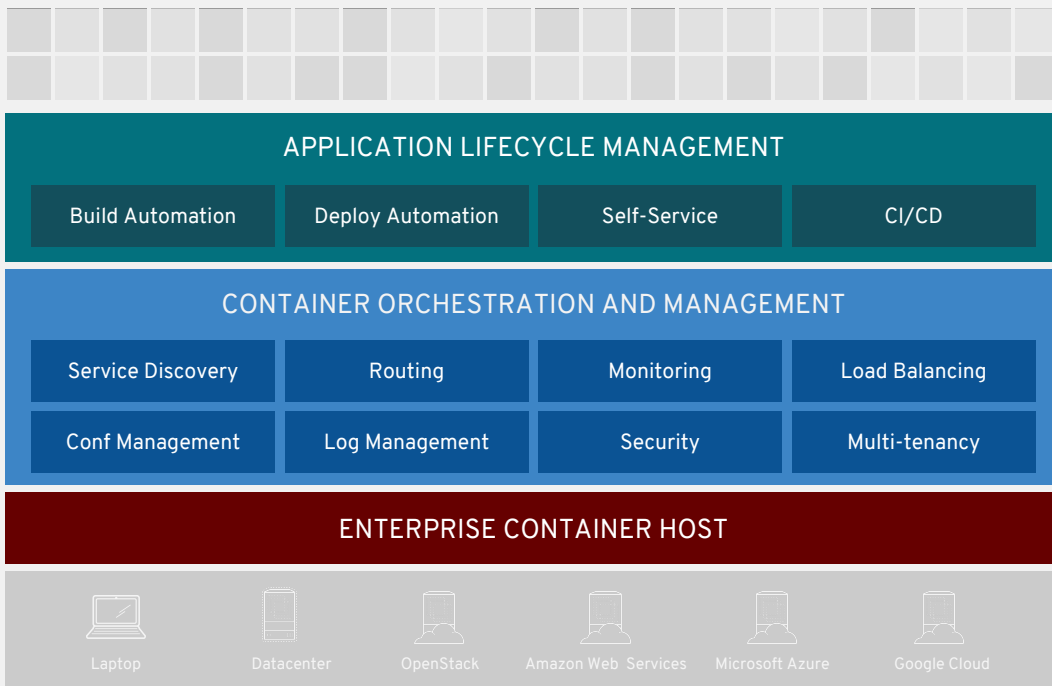
TIMO FRIMAN
Solution Architect

A DEVELOPER INTRODUCTION TO OPENSHIFT

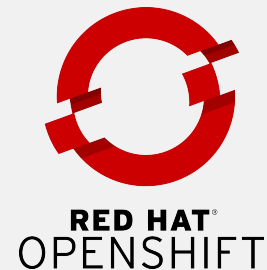


A secure and enterprise-grade container application platform based on Kubernetes for traditional and cloud-native applications

CLOUD-NATIVE CAPABILITIES WITH RED HAT OPENSIFT



ANY
CONTAINER



ANY
INFRASTRUCTURE

A container is the smallest compute unit

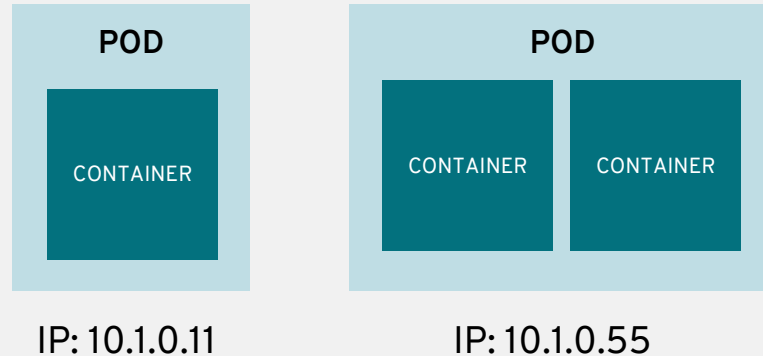


CONTAINER

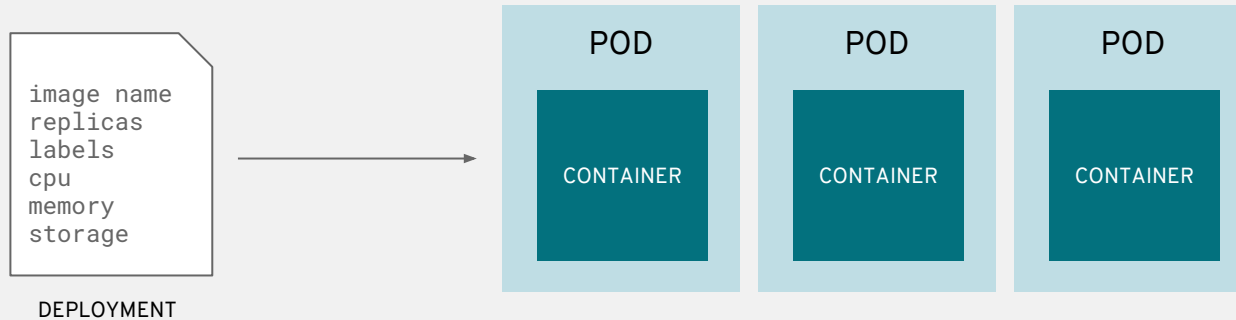
containers are created from
container images during a build



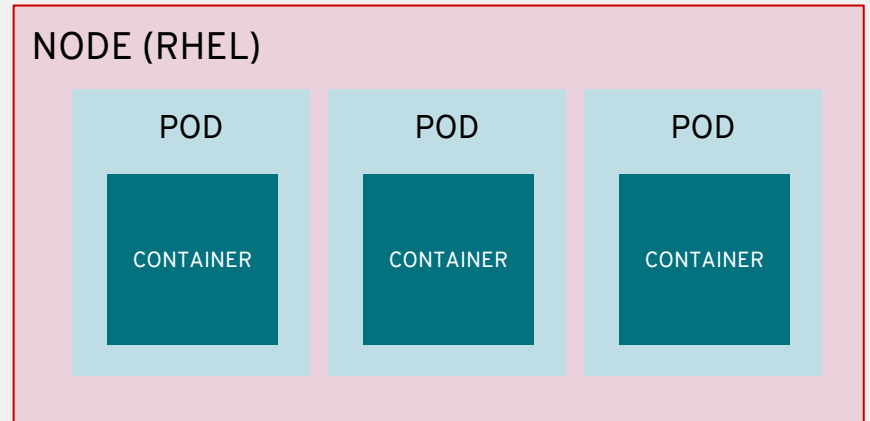
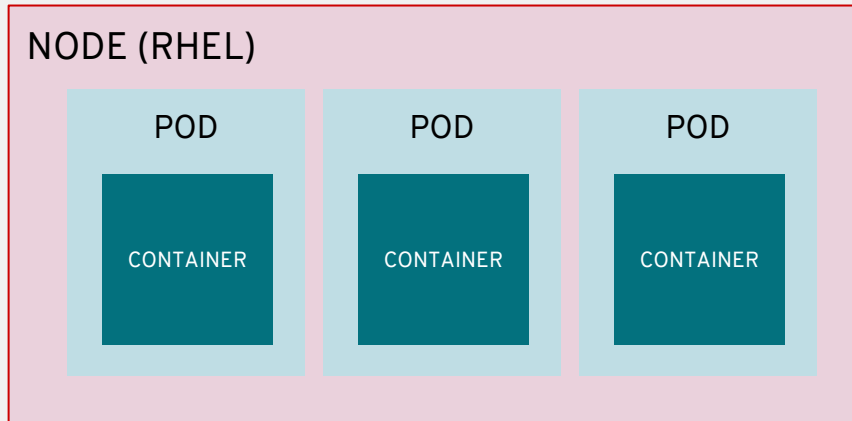
containers are wrapped in pods which are units of deployment and management, and share a common network address



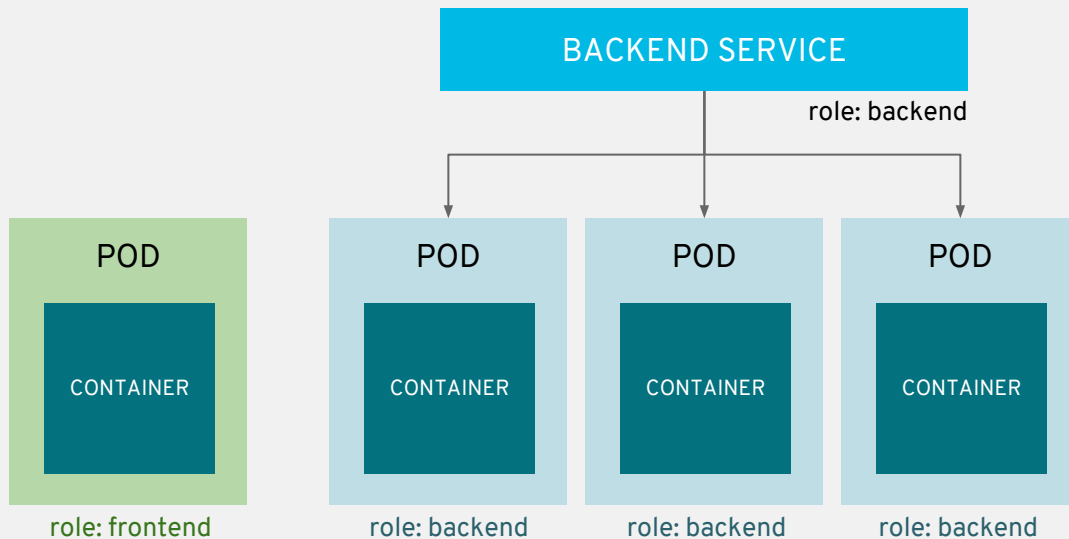
Pods configuration is defined in a deployment



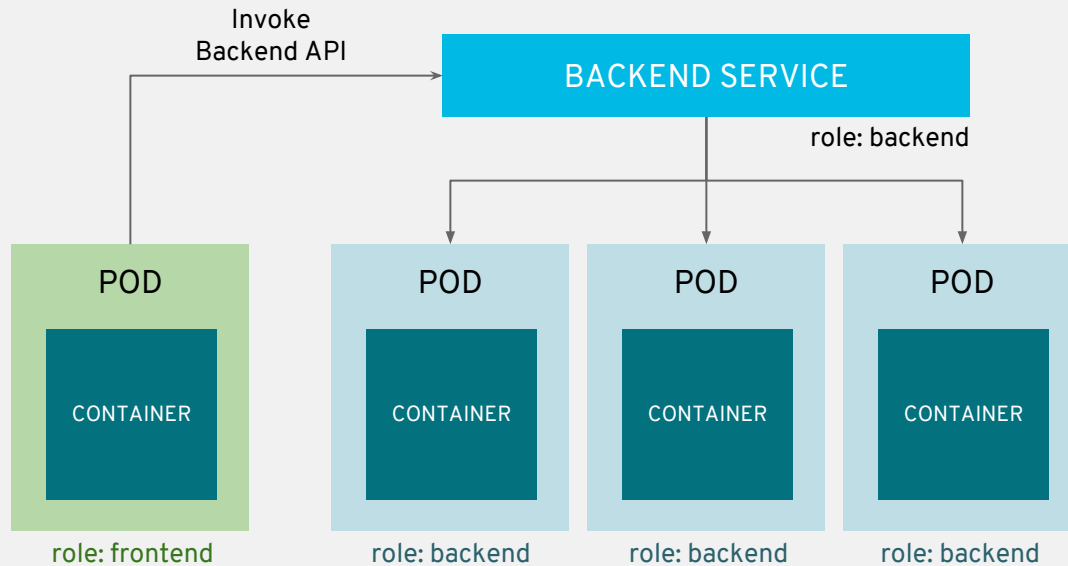
Pods are deployed to and run on nodes



services provide internal load-balancing and service discovery across pods

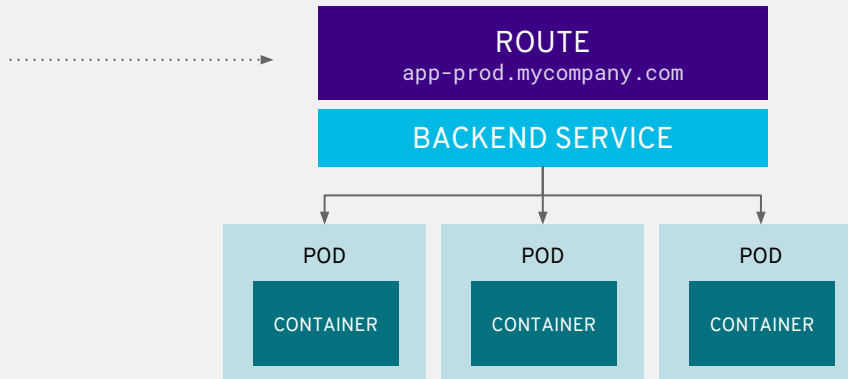


apps can talk to each other via services

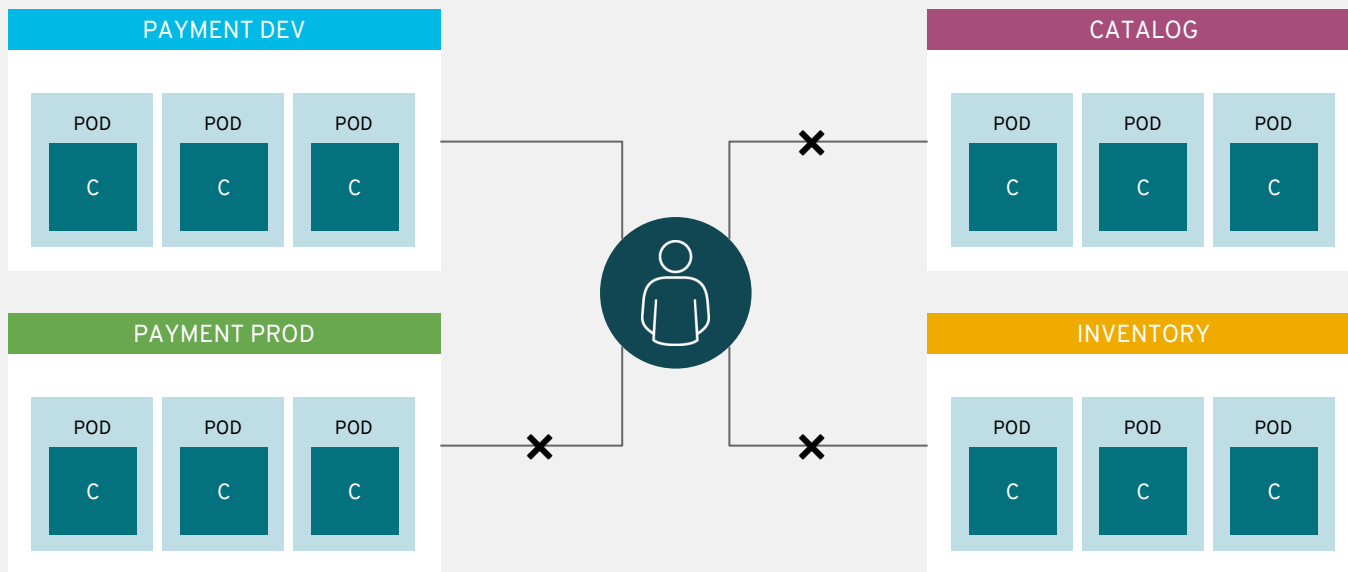


routes add services to the external load-balancer and provide readable urls for the app

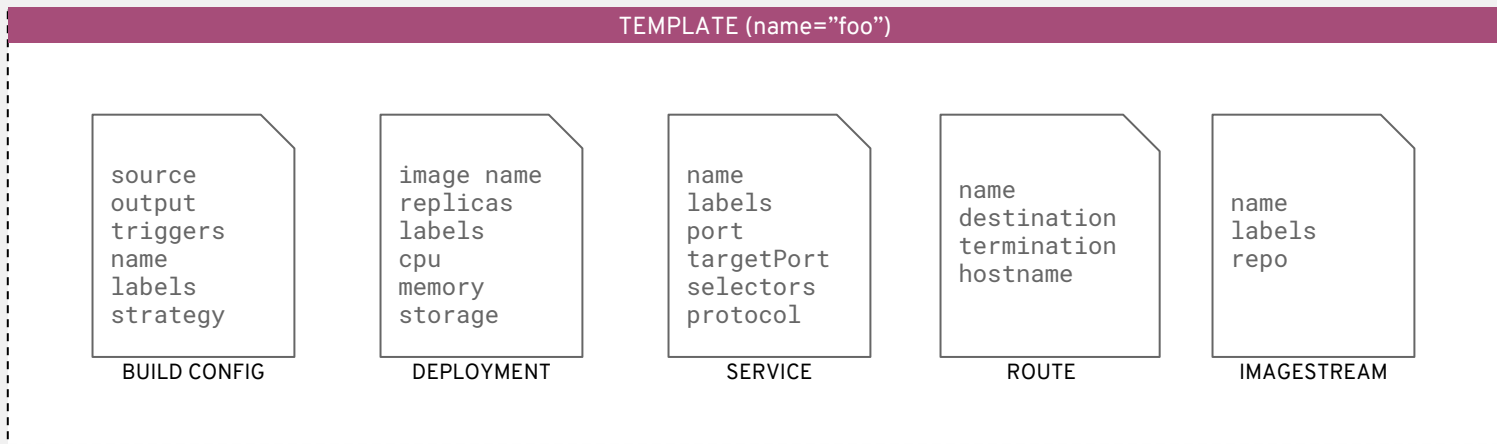
```
> curl http://app-prod.mycompany.com
```



projects isolate apps across environments,
teams, groups and departments



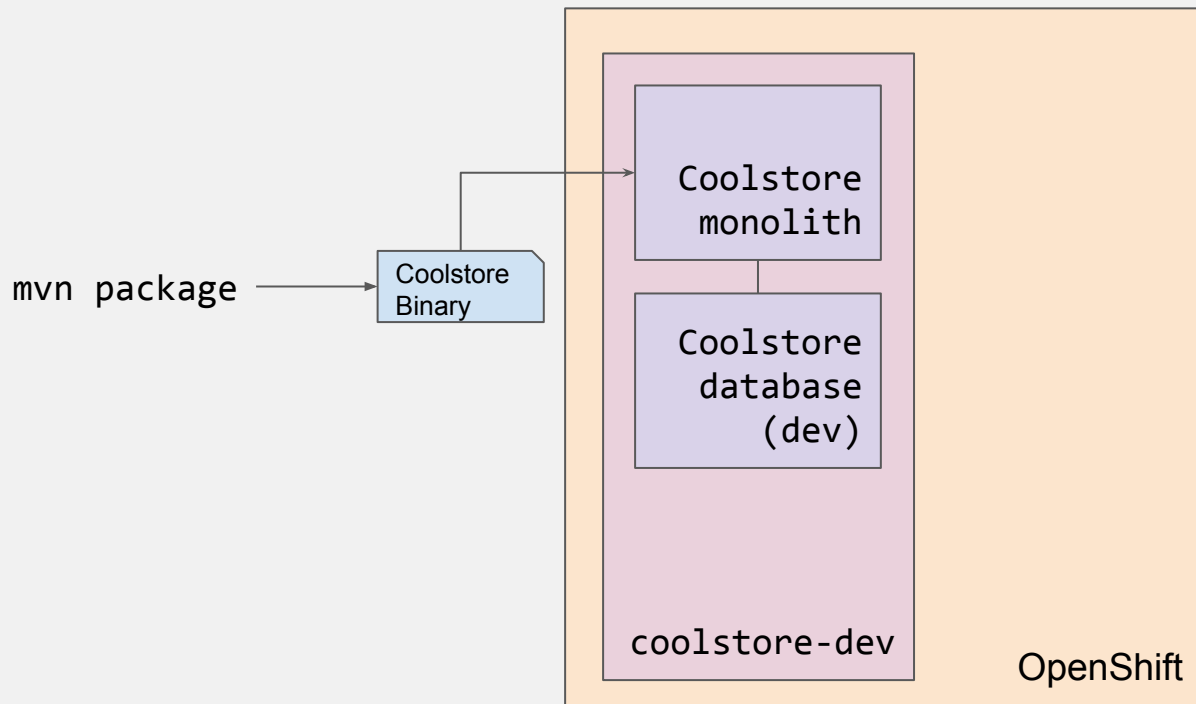
templates define a blueprint for an application that can be instantiated within a project



\$ oc new-app foo

LAB: DEVELOPER INTRODUCTION TO OPENSHIFT

CURRENT STATE



GOAL FOR LAB

In this lab you will learn:

- Important OpenShift concepts for developers
- How OpenShift makes developers and architects happier
- How to do efficient round-trip development:
 - Separate **dev** from **prod** environments
 - Quick deployments using **rsync** / port-forwarding
 - Promoting apps using **CI/CD Pipelines**

LAB: DEVELOPER INTRO TO OPENSIFT

WEB: openshift-modernize-apps.katacoda.com
SLIDES (PDF): bit.ly/m2m-slides

SCENARIO 3

A DEVELOPER INTRODUCTION TO OPENSIFT

WRAP-UP AND DISCUSSION

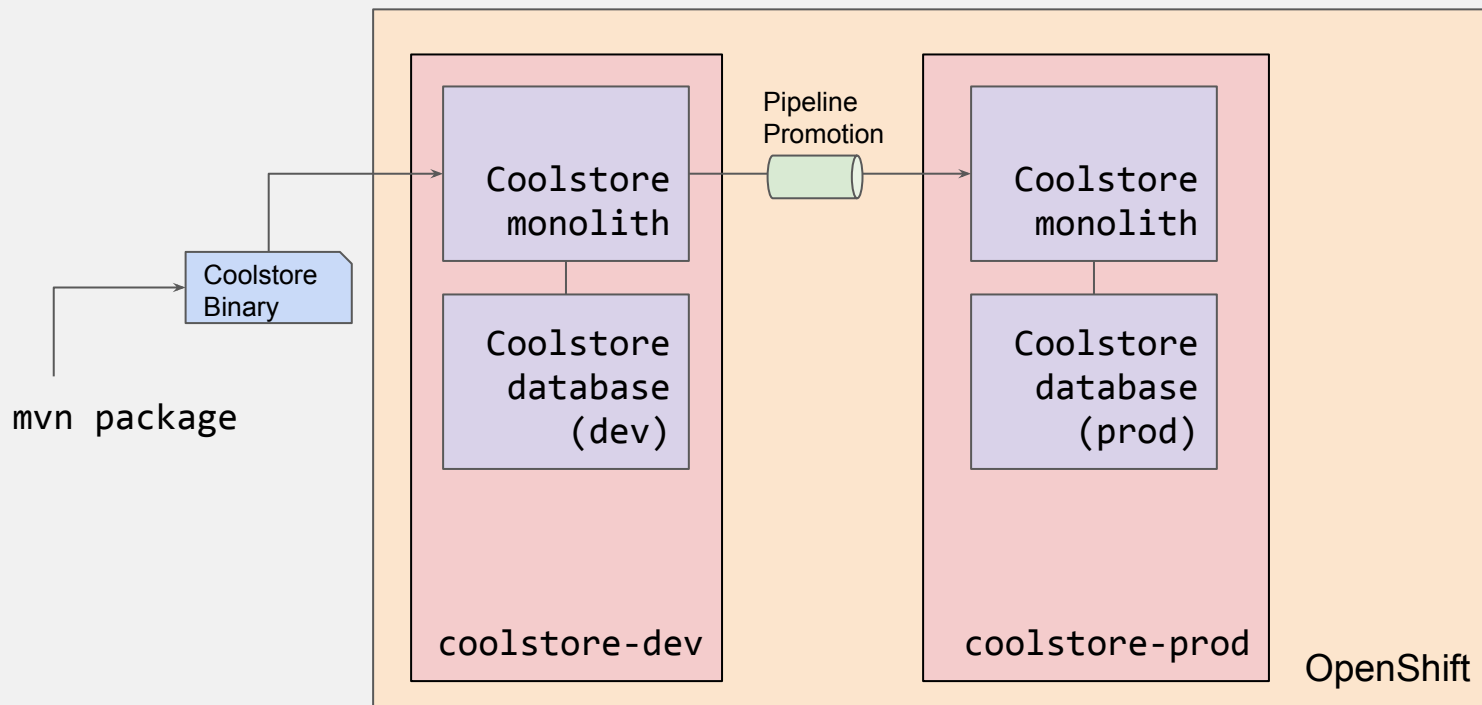
RESULT OF LAB

In this lab you learned how to:

- Do quick deployments with `oc rsync`
- Create a production environment separate from dev
- Promote tested/verified builds between environments using OpenShift pipeline builds

You should now have two projects (dev and prod) running the same CoolStore app! In the next lab we will begin the process of breaking the monolith up into microservices.

DESIRED RESULT OF SCENARIO 3





THANK YOU



plus.google.com/+RedHat



facebook.com/redhatinc



linkedin.com/company/red-hat



twitter.com/RedHatNews



youtube.com/user/RedHatVideos