

RED HAT FORUM | September 10 2019

Deploy and manage a microservice application as a service mesh on OpenShift

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Deploy and manage a microservice application as a service mesh on OpenShift

Red Hat Forum Zurich 2019 - Engineering track

Thomas Heute

Manager, Software Engineering

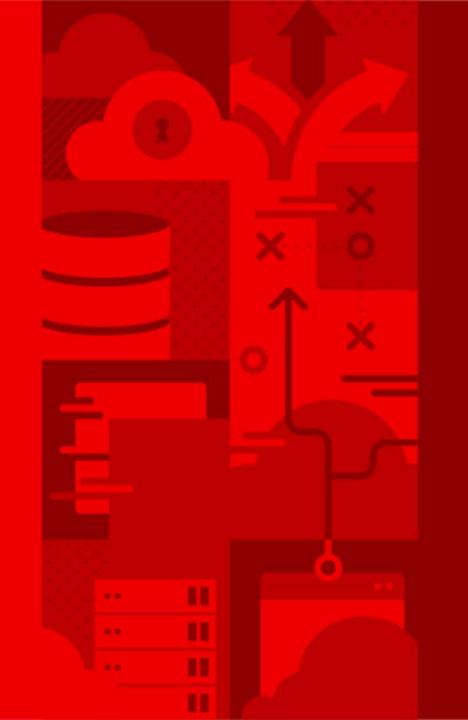
Pavol Loffay

Senior Engineer

Dimitris Andreadis

Director, Software Engineeing





A comedy play



The stage



Red Hat OpenShift 4.1

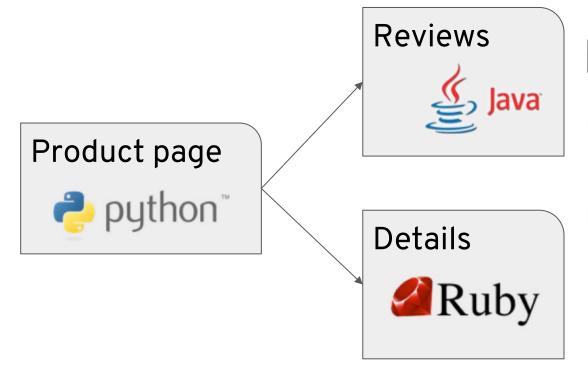
Basic installation of OpenShift 4.1 running on Amazon AWS

Red Hat OpenShift Service Mesh 1.0

Based on Istio
With Kiali (Observability)
With Jaeger (Distributed Tracing)



The story



BookInfo Sample

Sign in

The Comedy of Errors

Wikipedia Summary: The Comedy of Errors is one of William Shakespeare's early plays. It is his shortest and one of his most farcical comedies, with a major part of the humour coming from slapstick and mistaken identity, in addition to puns and word play.

Book Details

Paperback: 200 pages Publisher: PublisherA Language: English ISBN-10: 1234567890 ISBN-13:

123-1234567980

An extremely entertaining play by Shakespeare. The slapstick humour is refreshing!

- Reviewer1 Affiliation1

Absolutely fun and entertaining. The play lacks thematic depth when compared to other plays by Shakespeare.

- Reviewer2 Affiliation2



The actors

Thomas

Operator

Sometimes careful, sometimes
careless...
He'll get punished if the application
isn't working.

Pavol

Developer

Has the good role, receives user stories from the Product owner and throws over the fence to the Operator.

Dimitris

Product owner

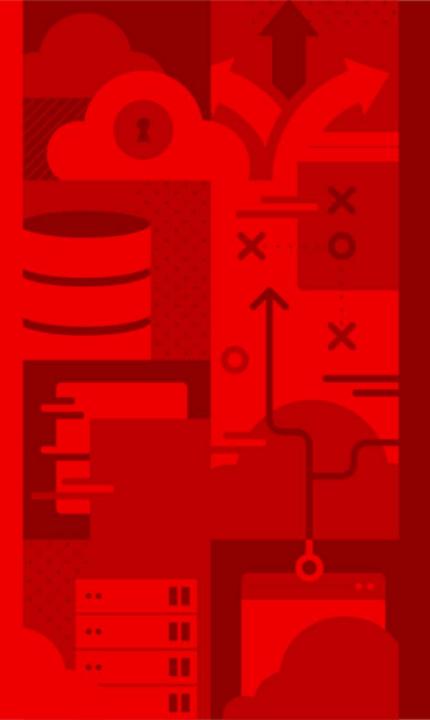
Defines the priorities for new features (Can be bribed).

You

End User

Hard to please. Get your phone ready...



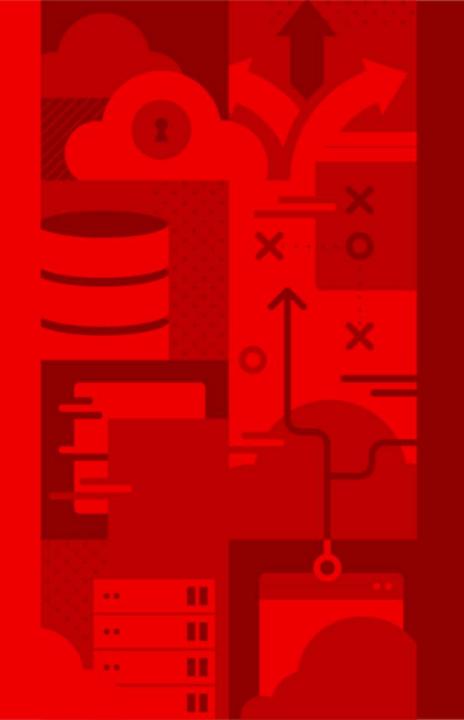


Let's start!

http://tinyurl.com/istiodemo

(You should just get an error at this point)





Summary



Summary

- We deployed multiple services in multiple languages on OpenShift Platform
- With Istio routing capabilities we routed traffic to various versions of the services
 - Canary deployment
 - Shadowing
- With Kiali we were able to analyse/visualize the health of the service mesh
 - See how services are "connected"
 - See metrics
 - Configure the service mesh
- Thanks to Jaeger we were able to collect more data about each requests





Red Hat OpenShift Service Mesh

• 1.0 is generally available on OpenShift 4.1



Thank you

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Application migration & modernization for AXA Switzerland

Vladimir Rimar, Consultant, Red Hat Gabriel Koch, Cloud Software Engineer, AXA Switzerland Nils Buer, Global Head of Solution Management, Stonebranch