

VOLVO CARS - APPLICATION SERVER PLATFORM



Robert Forsström

HELLO



Robert Forsström
Application Server Platform Architect



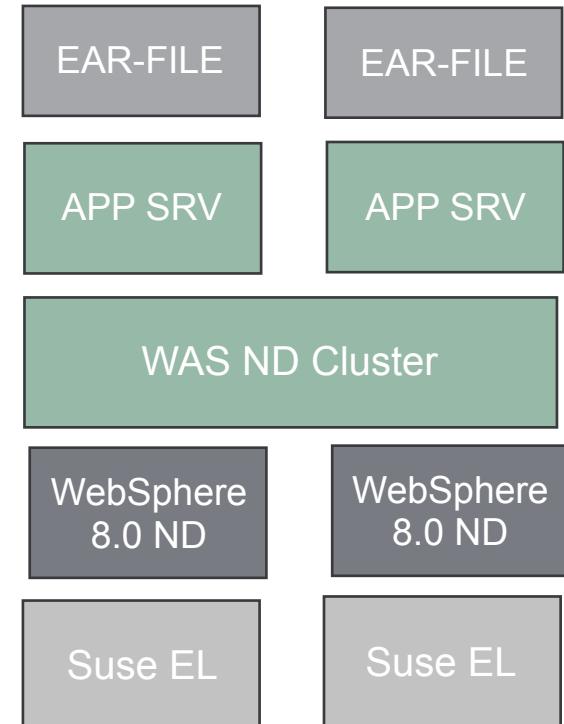
WHAT WE DELIVERED



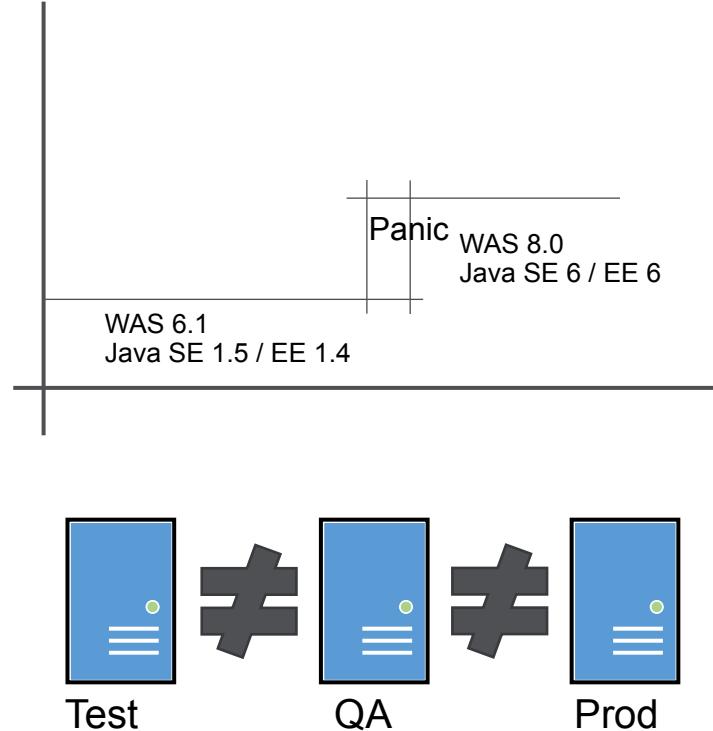
Provides Java EE to our internal customers.

- 785 Applications
- 560 Application Servers
- 80 Physical Hosts

Stable Environments



ISSUES WITH THE OLD PLATFORM





DESIGNING THE NEW PLATFORM

- Always offer the latest versions of Java / Java EE
- Multiple Locations World Wide / Cloud
- Modern, fast and adoptive.

- Isolation
- Imutable
- Idempotent



HOW WE WORK



Our platform is stable and our customers trust us and the platform

We approach everything in a scientific way.

Fail fast – Failure is also a result!

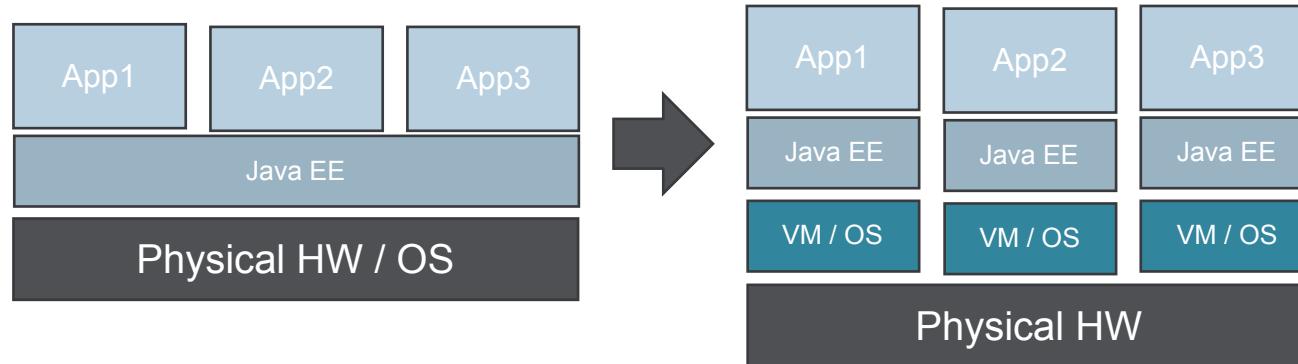
We are transparent with what we do, what we deliver and how.

Everything is Code! Even infrastructure.

We communicate through API:s



OUR FIRST DRAFT - VIRTUAL MACHINES



- Can automate everything.
- Isolated environments - can run different versions of Java
- 80 physical servers becomes 850 virtual servers.
- The configuration is only known directly after provisioning.

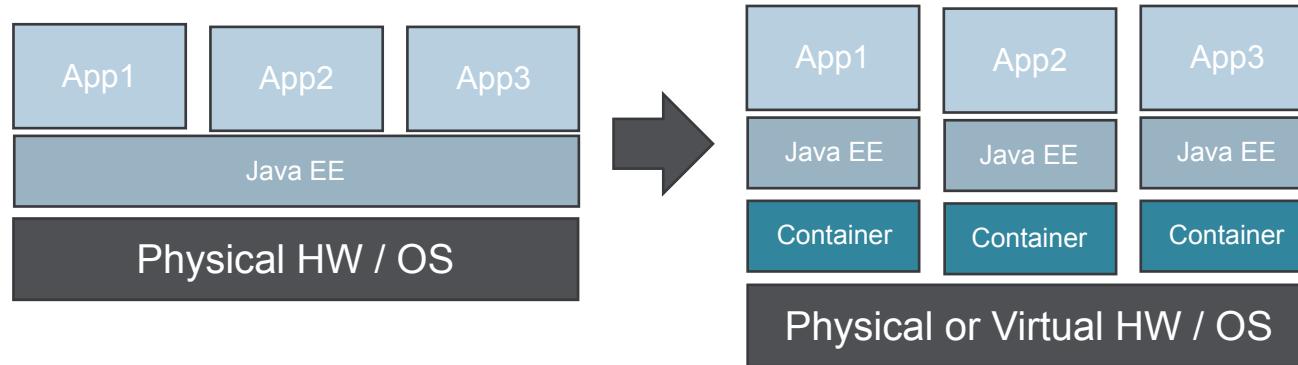
LOOKING AHEAD



- DevOps
- Microservices



OUR SECOND DRAFT- CONTAINERS



- Possibility to automate everything.
- Isolated environments - can run different versions of Java.
- Less usage of hardware.
- The configuration is known at all times.

OPEN SHIFT



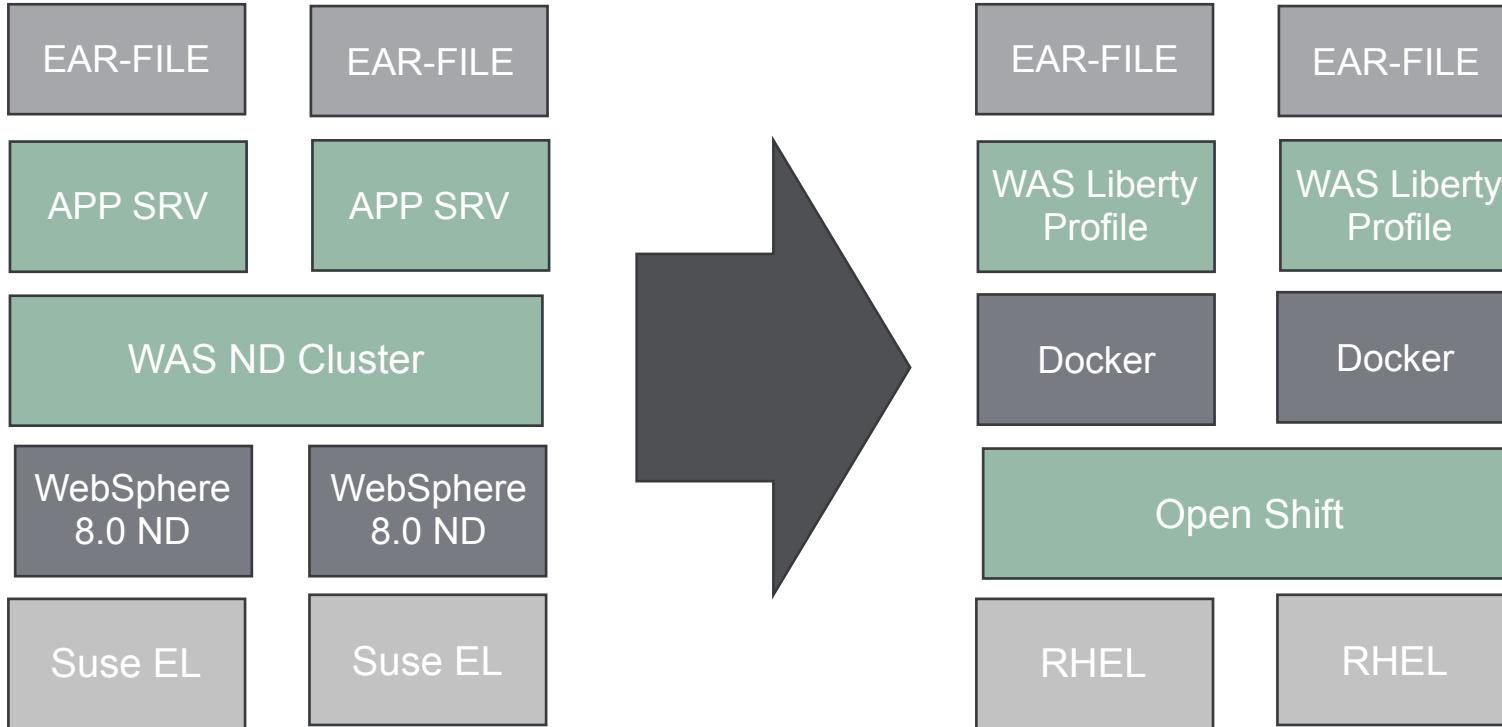
- Provides the build, distribution and runtime environment.
- Distribution to the cloud.
- Designed with the developer in mind.
- Nice API:s that we can use to create self-service.
- Potential to start using microservices.

ANSIBLE TOWER



- Automate everything
- Idempotent
- Nice API:s that we can use to create self service
- Create and manage components outside Openshift.
- Manage Open Shift.

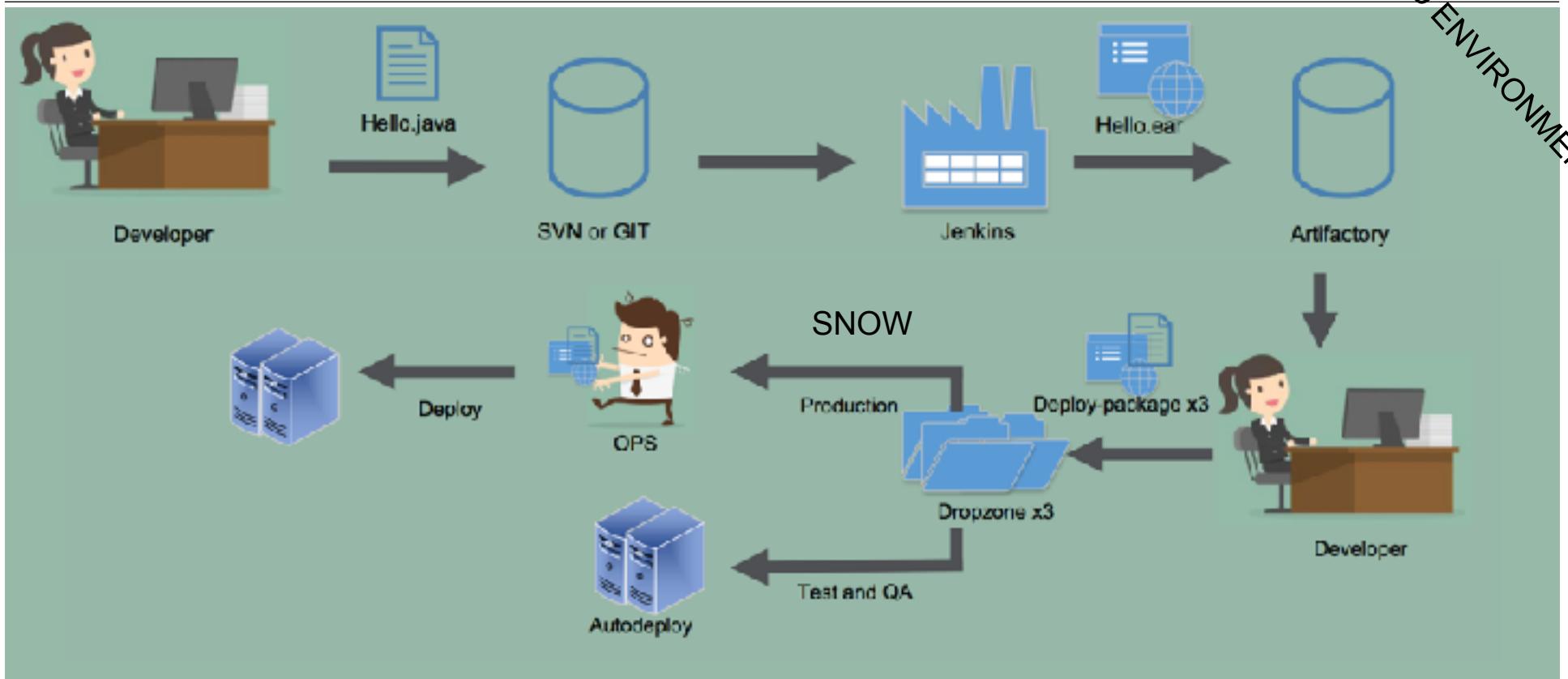
OUR NEW ENVIRONMENT



DESIGNING FOR OUR END USERS. DEV & OPS



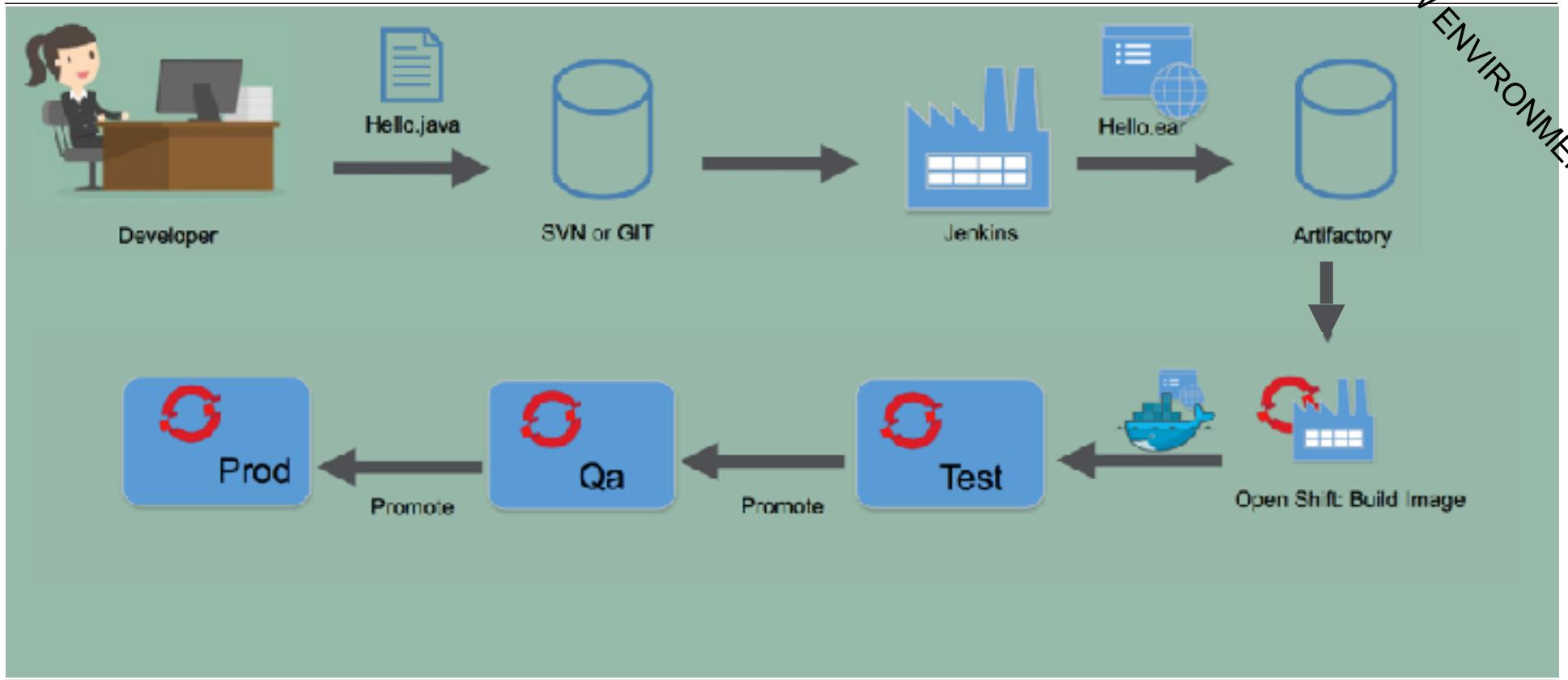
OLD ENVIRONMENT



DESIGNING FOR OUR END USERS. DEV & OPS



NEW ENVIRONMENT



MASP



MODERNIZED APPLICATION SERVER PLATFORM

Solution MSU - Image.msu v1.0.2

OVERVIEW BUILD PROMOTE DEPLOY

MSU

- Solution
- Images
- Environments
- Logs

Admin

Logout Barth Verjov

Environment msu-test

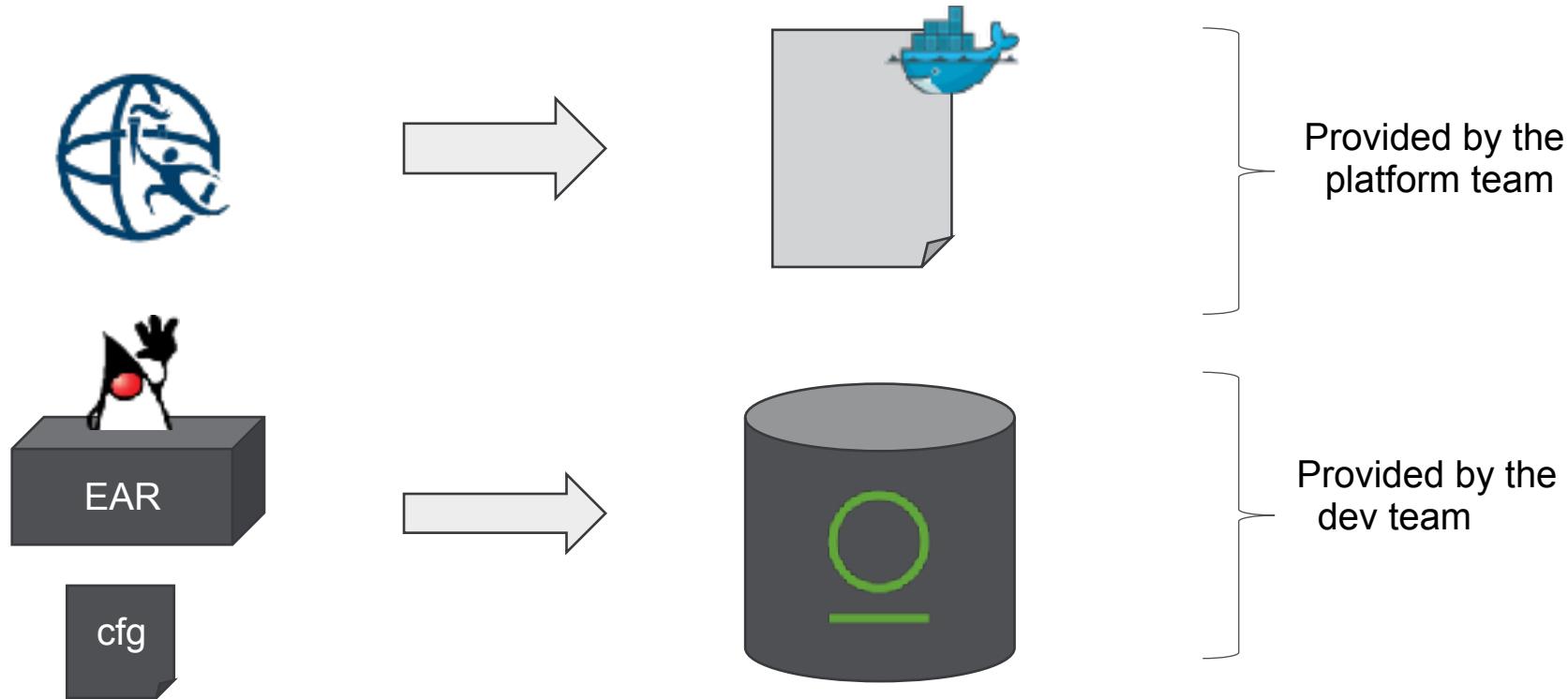
#81 Running RECREATE Deployment history

Since 6 hours ago

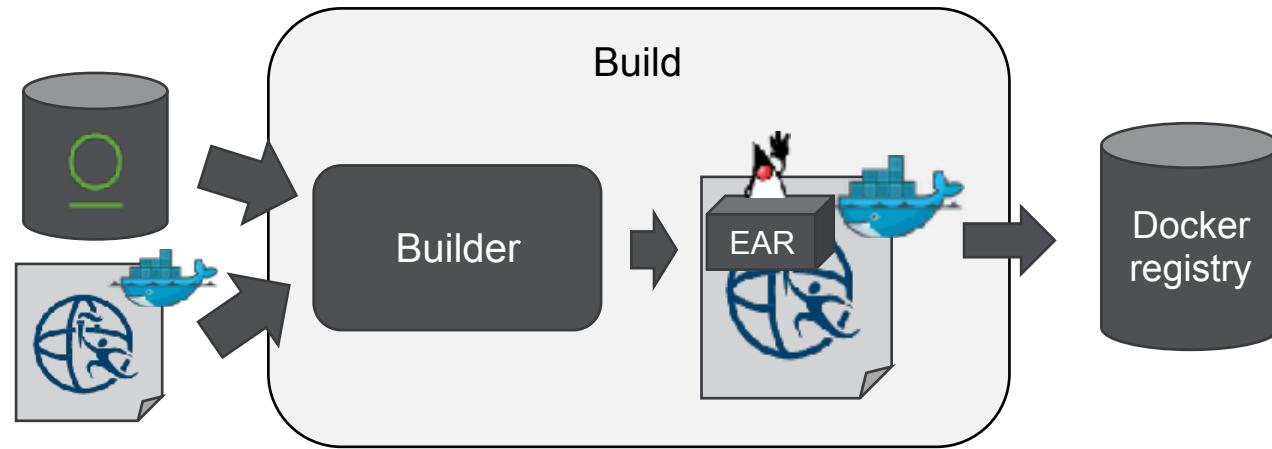
msu-msu-test: alpine-app:environment-test

Revision	Version	Created	Deployment Phase
#84	msu:latest	2017-06-17T18:24:00Z 6 hours ago	Deployed
#83	msu:latest	2017-06-17T05:20:00Z 6 hours ago	Complete
#82	msu:latest	2017-06-17T05:16:00Z 6 hours ago	Complete
#81	msu:latest	2017-06-17T05:07:00Z 6 hours ago	Complete

BUILD PROCESS



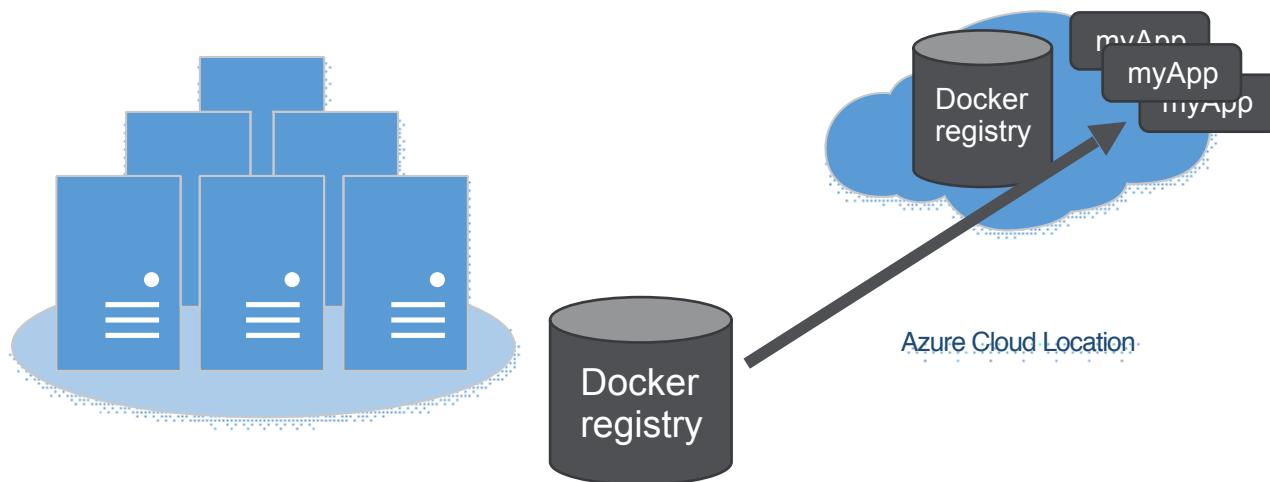
CONTAINER BUILD PROCESS



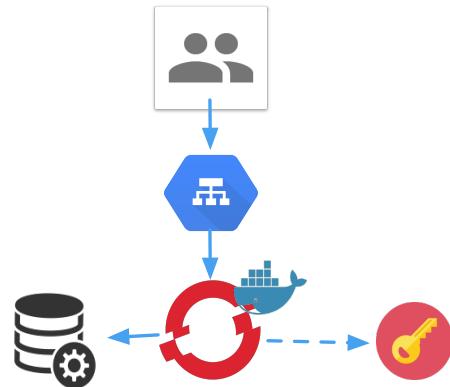
CLOUD DEPLOYMENT



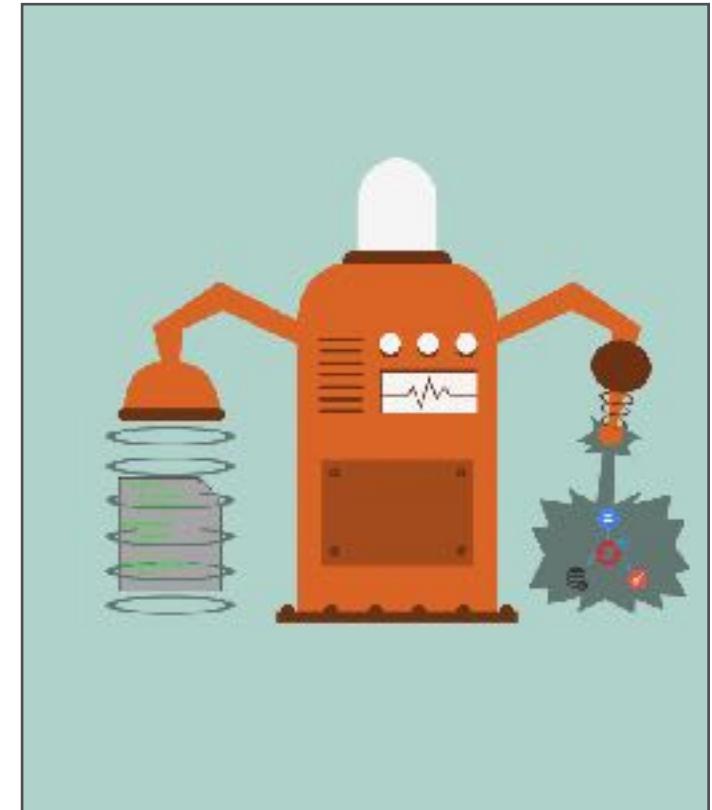
- Microsoft Azure
- Automated provisioning of environments using Ansible scripts.



HOLISTIC AUTOMATISATION



```
- masp_service:
  namespace: parrot
  name: test
  sites:
  - eriksberg
  - charleston
  routes_external:
  - stuff.volvocars.biz
  routes_internal:
  - internal
  instances: 2
  image: "abc/robert:latest"
```



SUMMARY



THANK YOU



robert@middleware.se