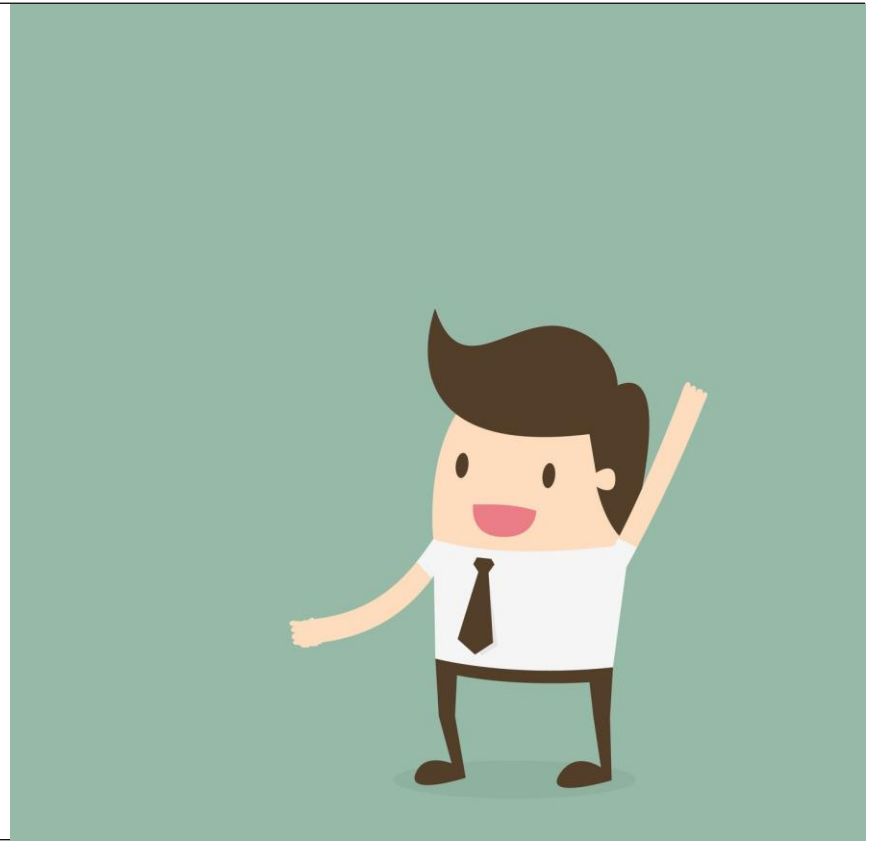
VOLVO CARS – JAVA EE PLATFORM

ROBERT FORSSTRÖM

INTRODUCTION



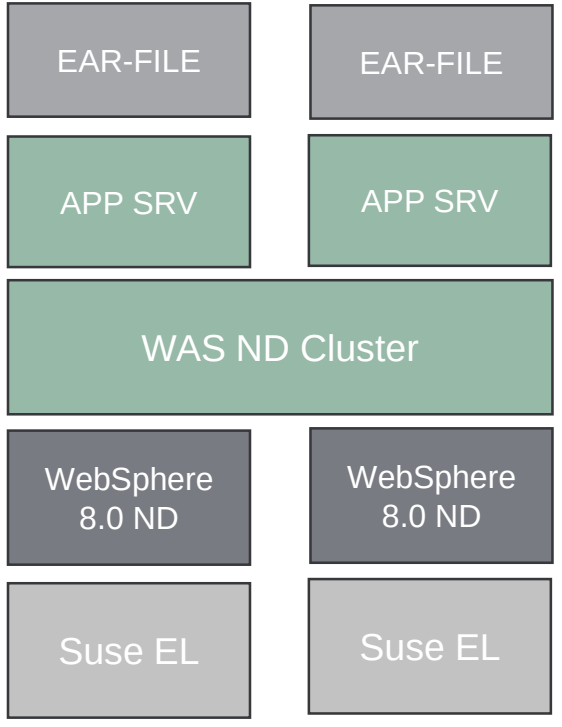
Robert Forsström

Java EE Platform Architect

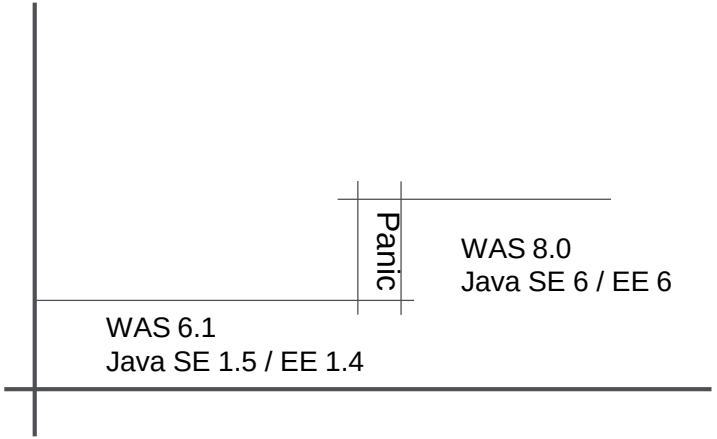
OUR CURRENT ENVIRONMENT

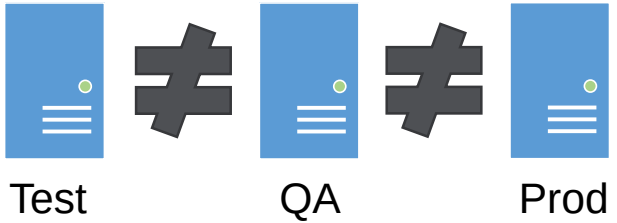
Provides Java EE to our internal customers.

- 785 Applications
- 560 Application Servers
- 80 Physical Hosts



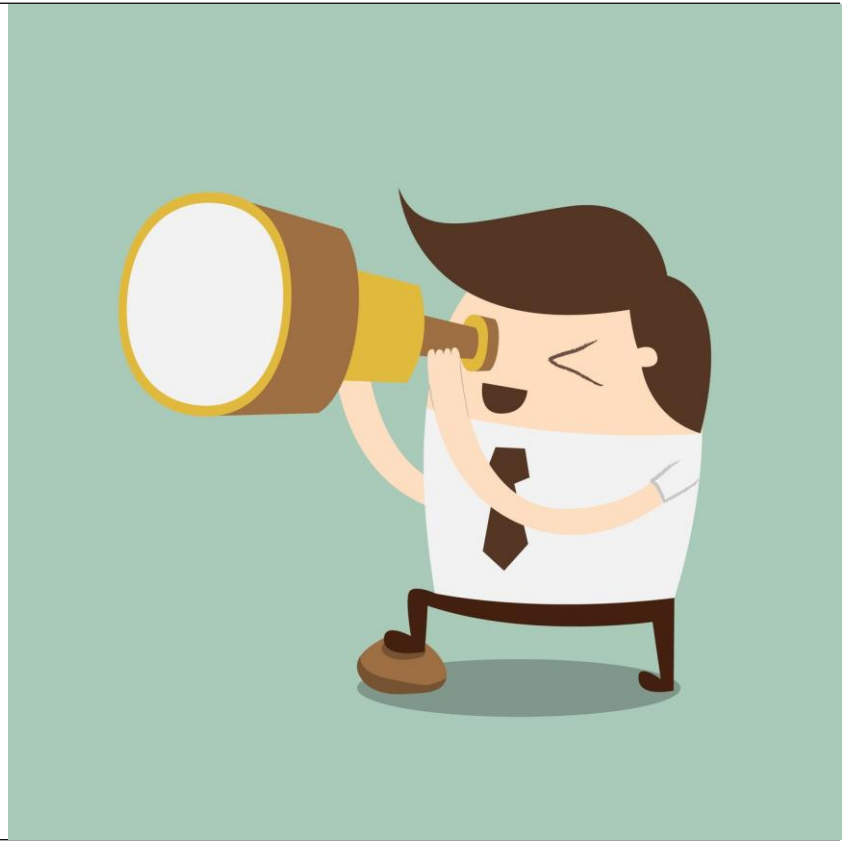
ISSUES WITH THE CURRENT PLATFORM



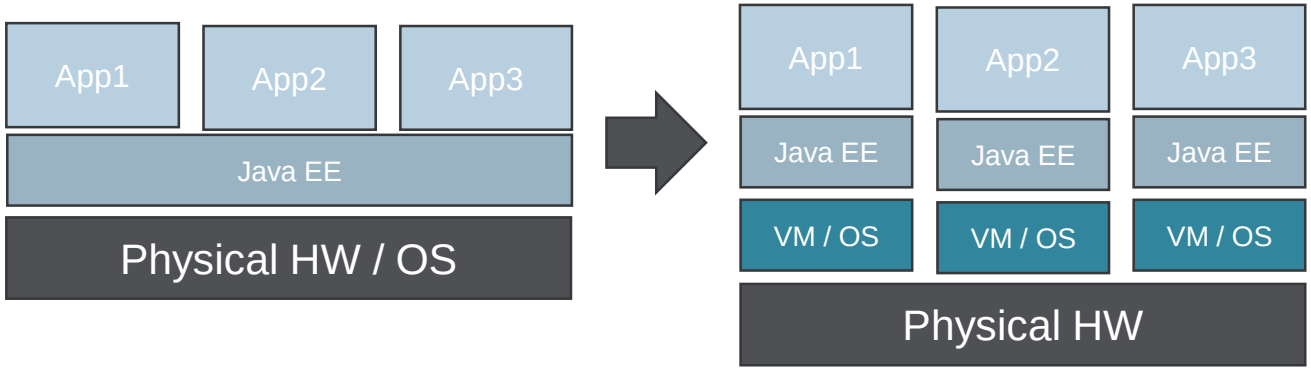


DESIGNING THE NEW PLATFORM

- Always offer the latest versions of Java / Java EE
- Multiple Locations World Wide / Cloud
- Isolation
- Imutabillity
- Idempotency



OUR FIRST DRAFT – VIRTUAL MACHINES



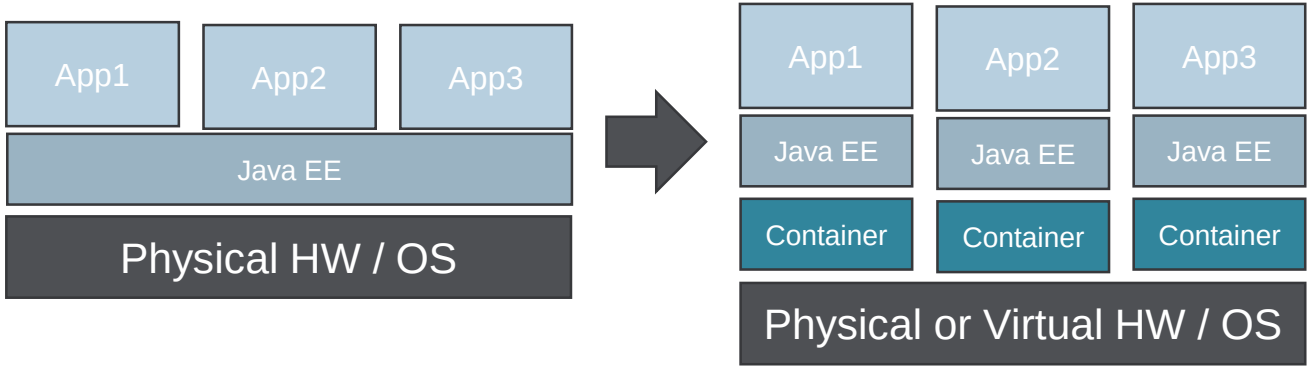
- Can automate everything.
- Isolated environments - can run different versions of Java

- 80 physical servers becomes 850 virtual servers.
- The configuration is only known directly after provisioning.

LOOKING AHEAD

- DevOps
- Microservices

OUR SECOND DRAFT – CONTAINERS



- Possibillity to automate everything.
- Isolated environments - can run different versions of Java.

- Less usage of hardware.
- The configuration is known at all times.

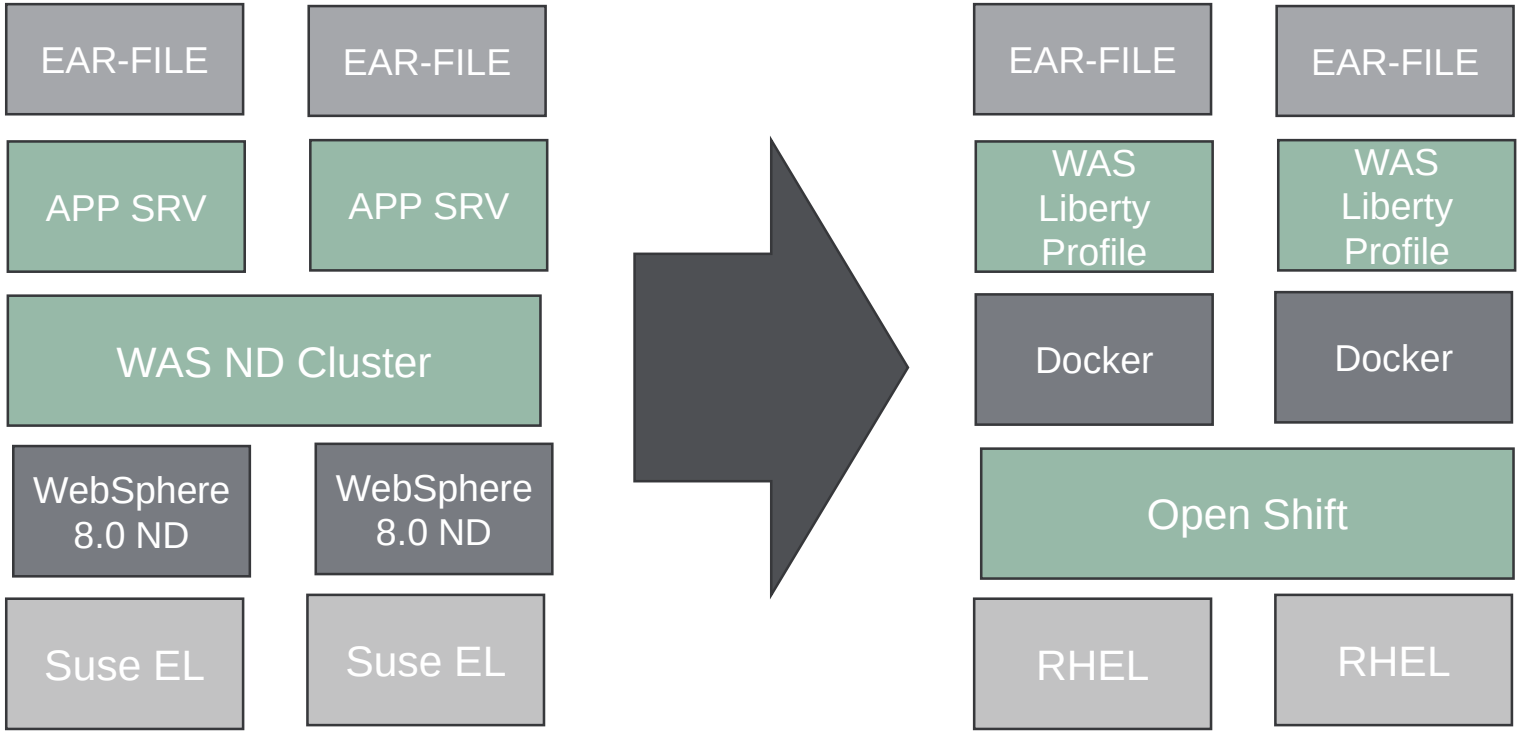
OPEN SHIFT

- 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.

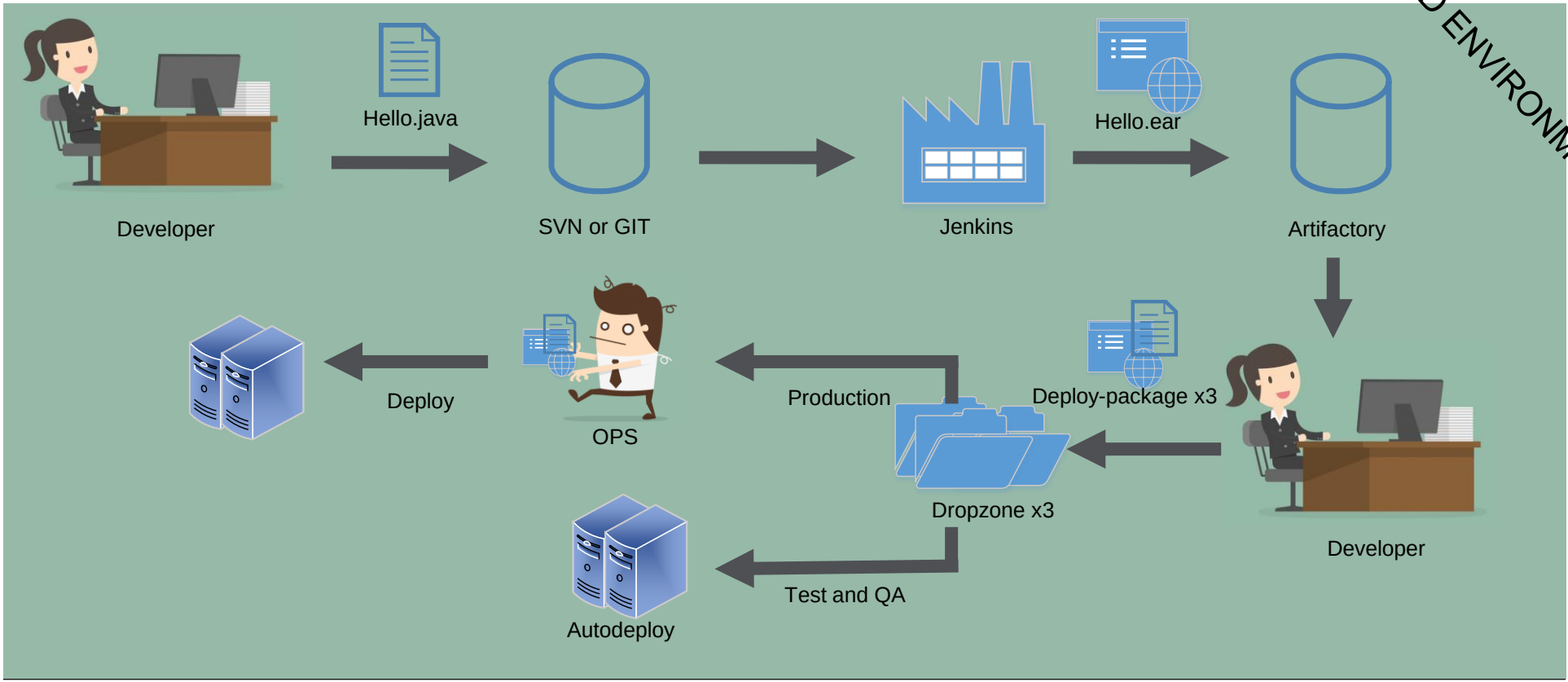
ANSIBLE TOWER

- 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, DEVELOPERS & OPS



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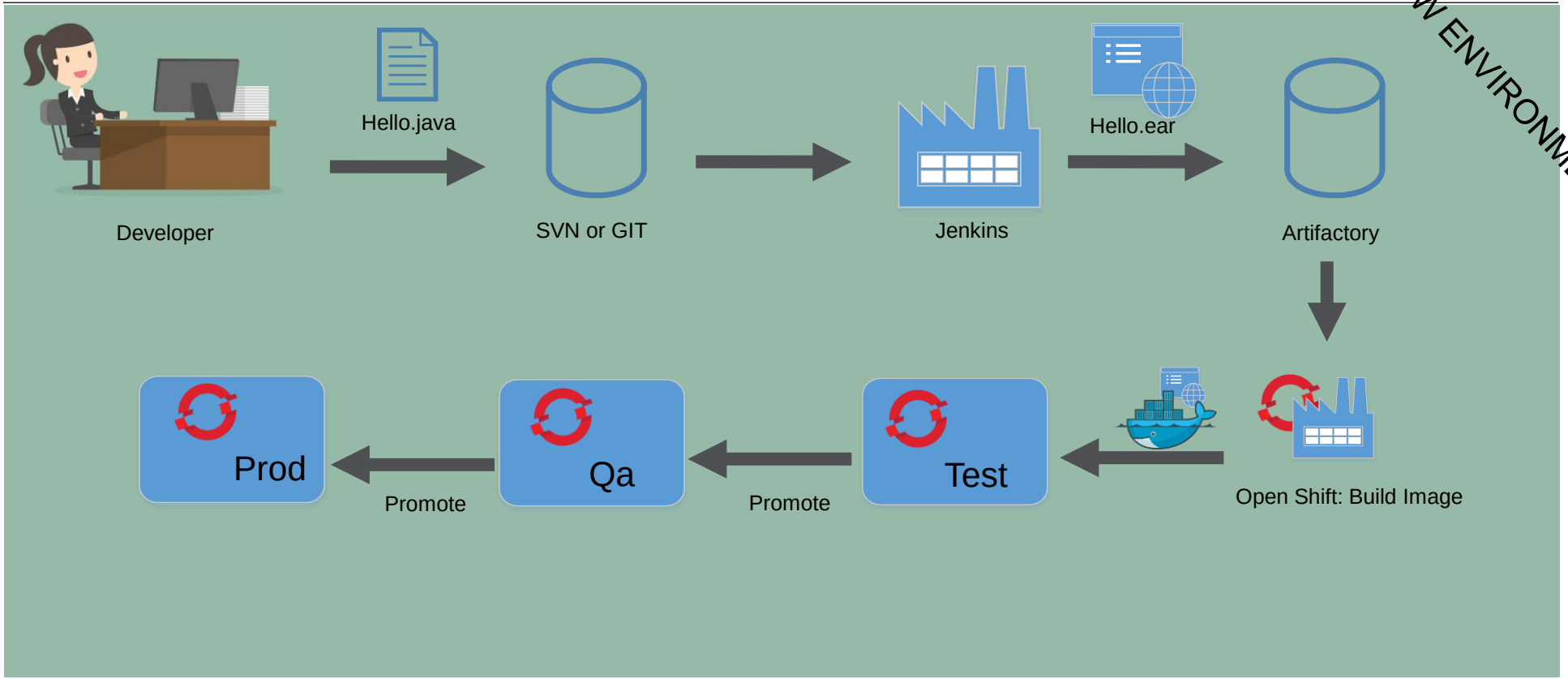
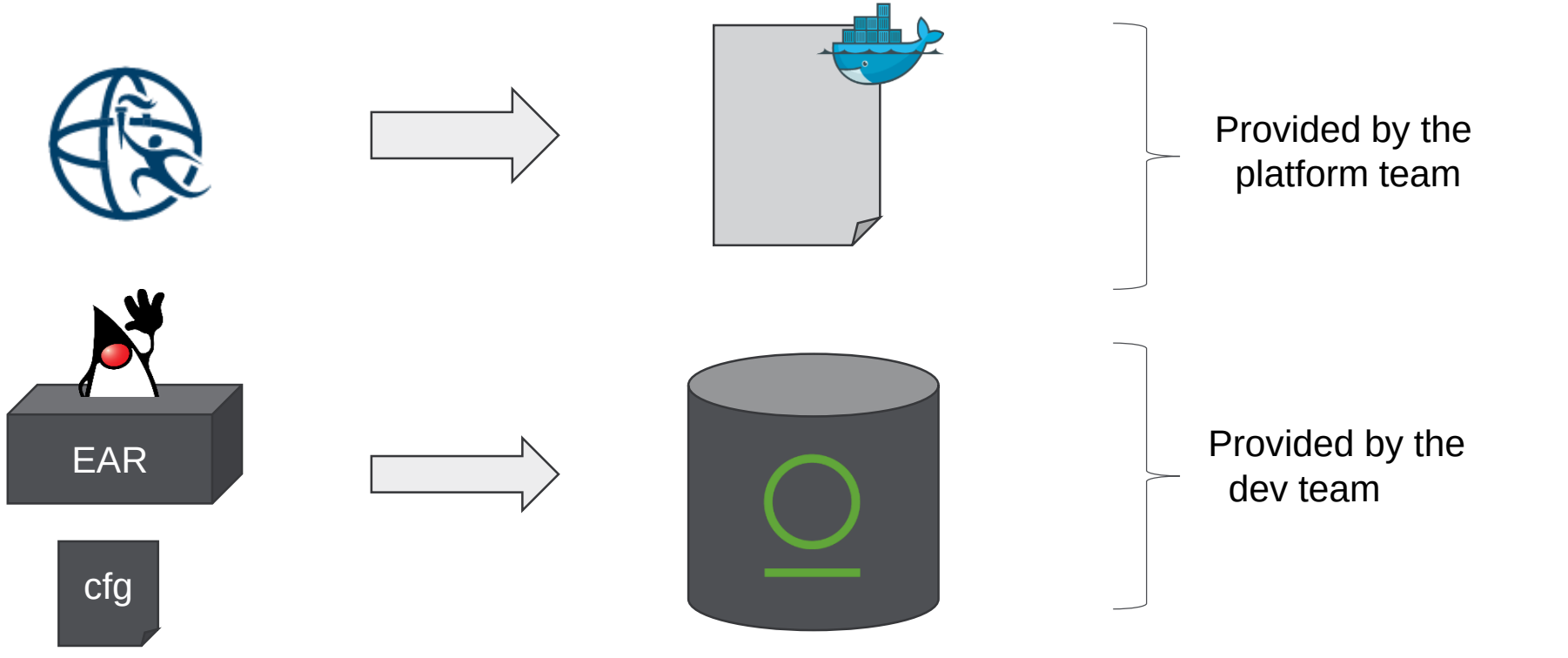
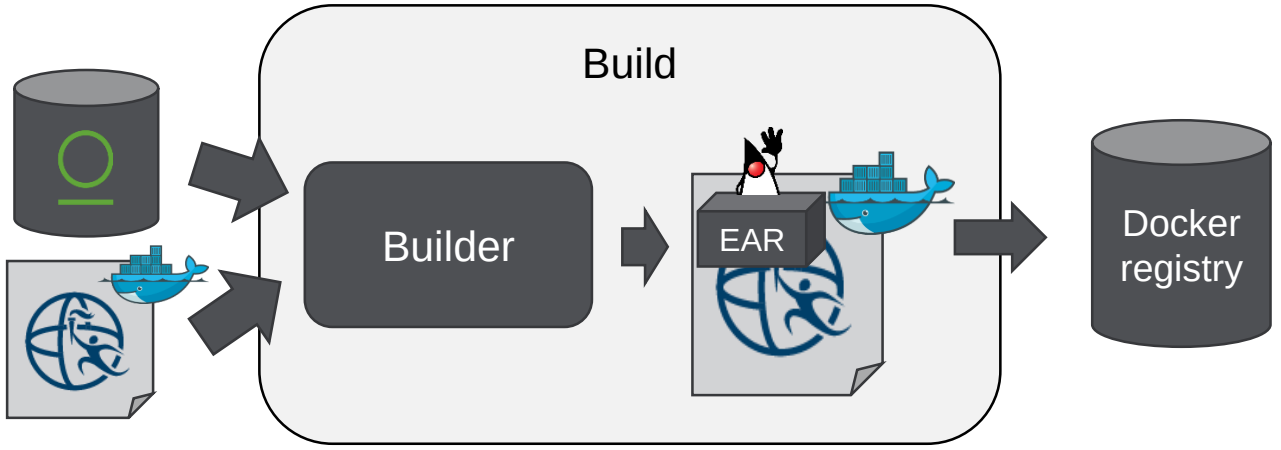


BUILD PROCESS

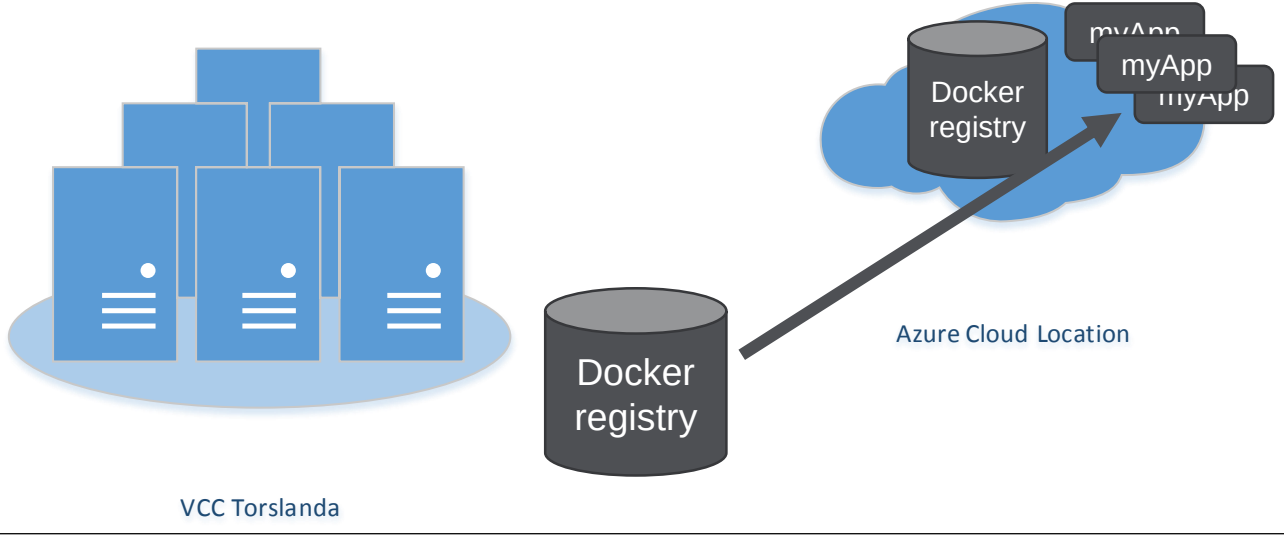


CONTAINER BUILD PROCESS

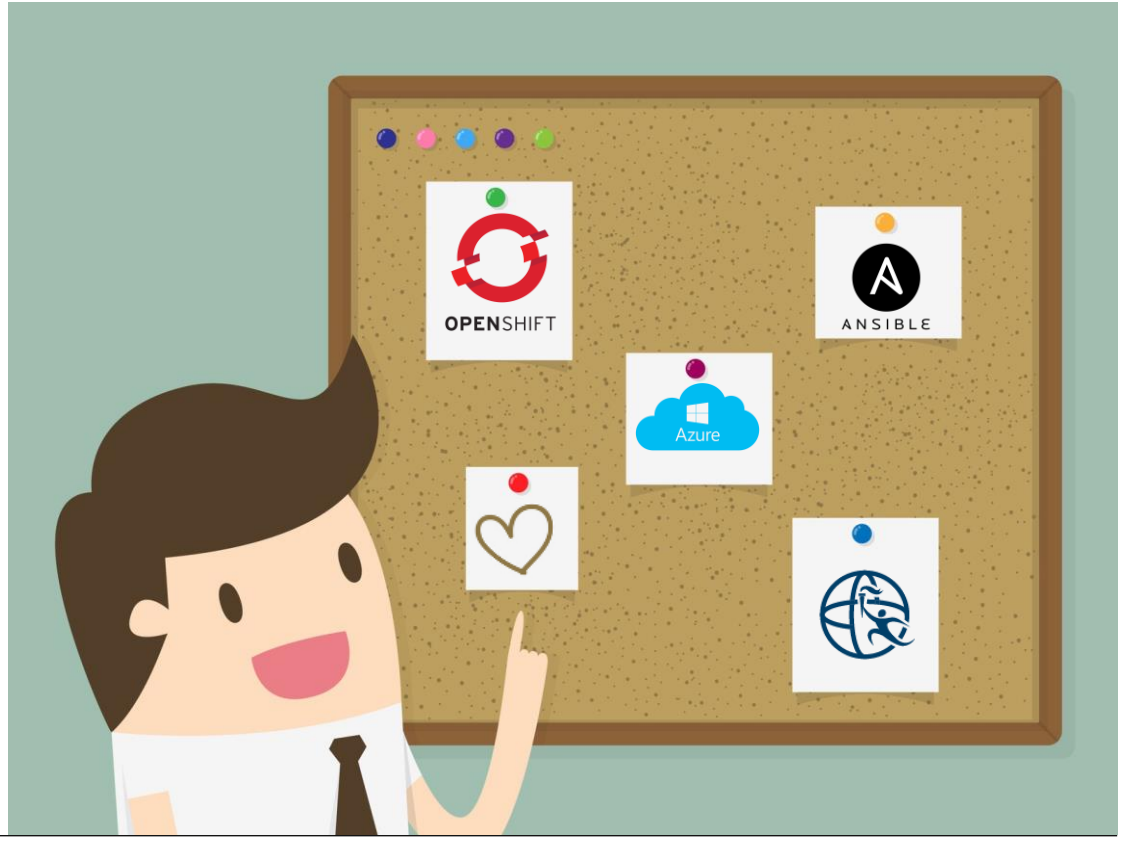


CLOUD DEPLOYMENT

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



SUMMARY



THANK YOU

ROBERT@MIDDLEWARE.SE