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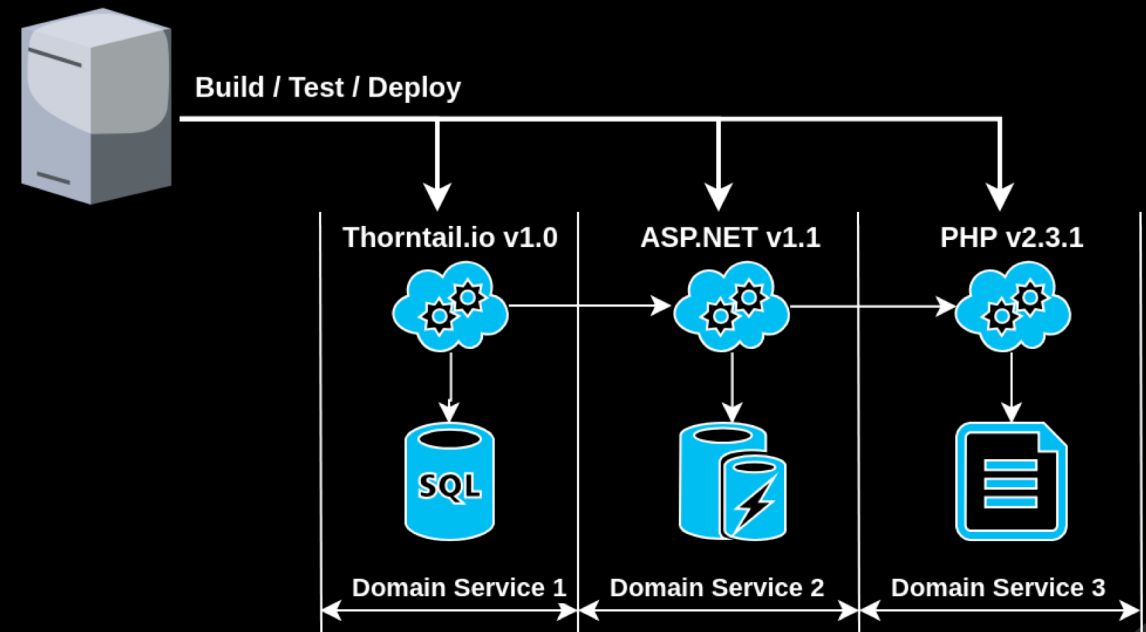


Microservices with Thorntail.io



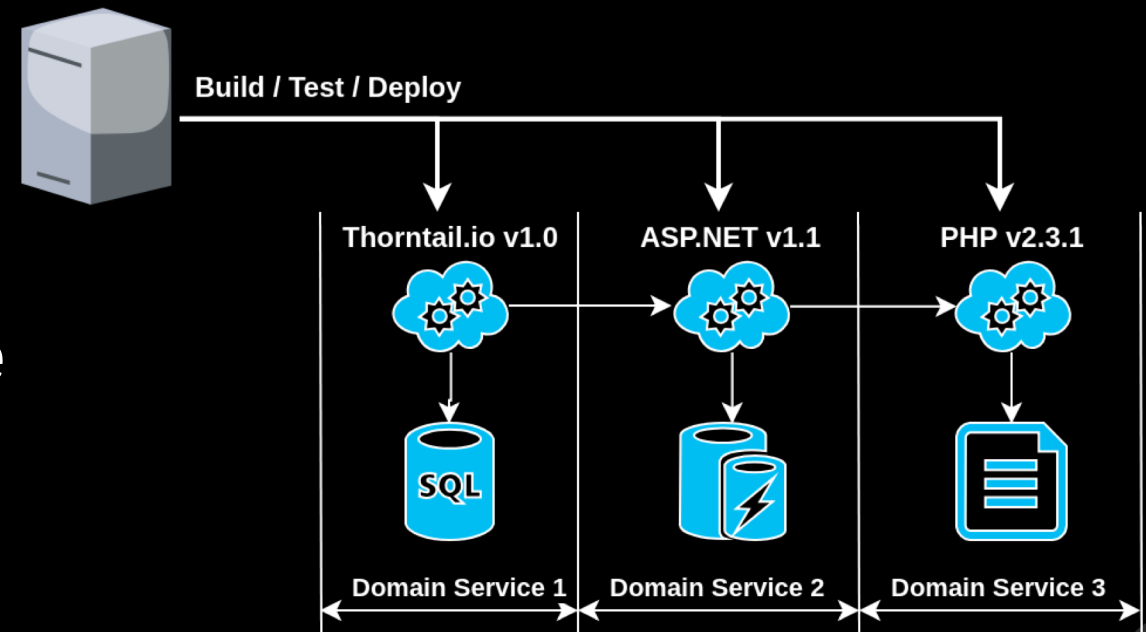
What are Microservices?

- Fully decoupled
- High level of cohesion
- Communicate via REST
- One service equals
 - one domain
 - one life cycle
 - one release cycle
- Standalone applications



Advantages of Microservices

- Small deployment units
- Fully decoupled domains
- Different languages possible
- Different data storages possible
- Easy to containerize
- Easy to distribute
- Easy to scale



What is Thorntail.io?

- JEE answer to Spring Boot
- Based on Wildfly Server
- Optimized for MicroProfile
- Integrates MicroProfile specs.
- Results in standalone jar
- 100% Jakarta Enterprise



THORNTAIL

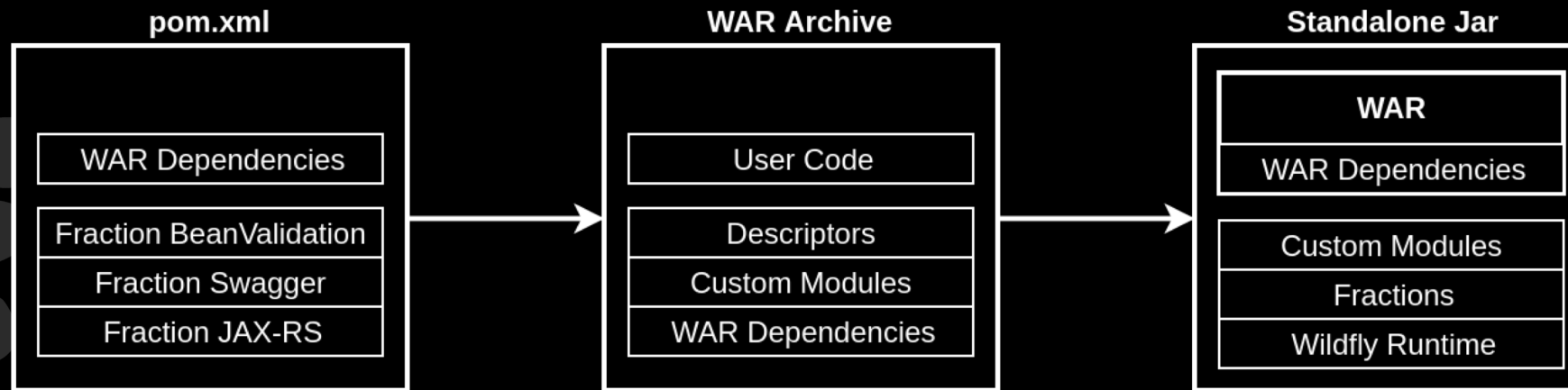
<https://thorntail.io/>



MICROPROFILE™
OPTIMIZING ENTERPRISE JAVA

<https://microprofile.io/>

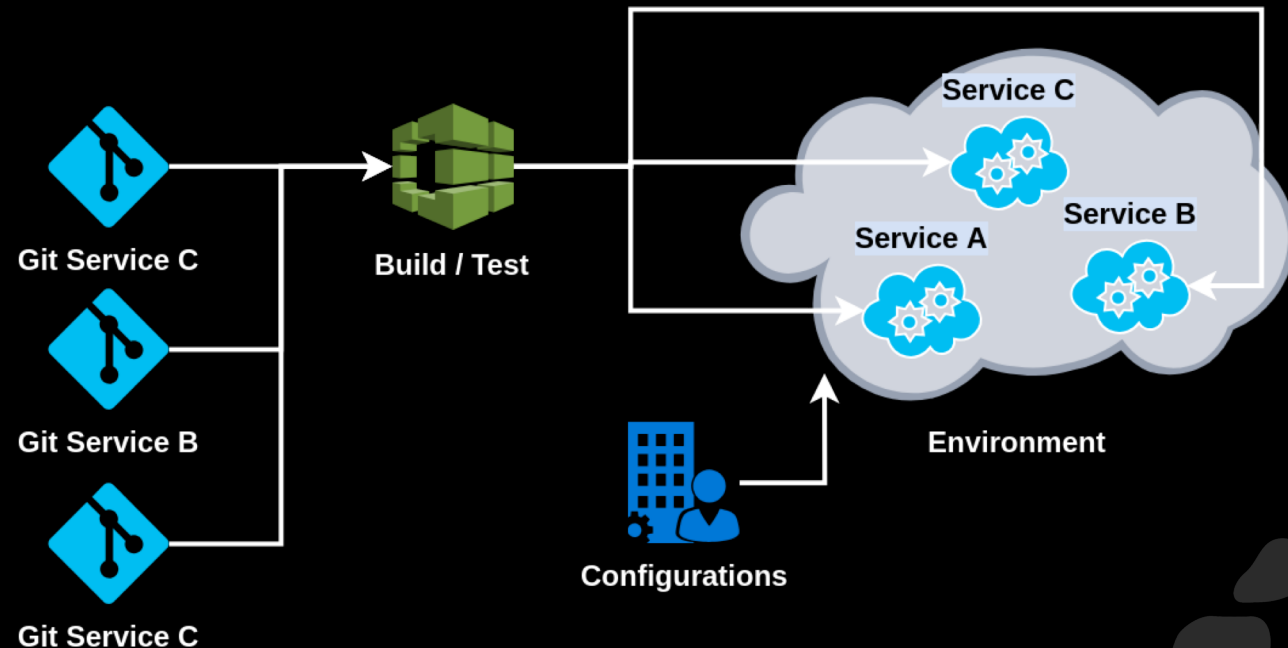
Structure of Thorntail.io?



- Framework consists of so called Fractions
(Similar to Spring Boot Starter Projects)
- Fractions bring in aspects
(e.g.: JAX-RS, Swagger)
- Defined by `pom.xml` and configuration files

Releases with Thorntail.io

- Each service
 - in own repository
 - with own build / test / release
- Smaller units to release
 - faster to build / test / deploy
 - faster to respond to issues
- Larger files to deploy ($\geq 100 MB$)
 - has its own runtime
- Configurable via
 - configuration file
 - system properties
 - environment variables
 - custom configuration source



Deployments with Thorntail.io

- Deploy on an application server
 - Needs to provide dependencies
- Deploy as standalone services
 - Provides all dependencies
- Deploy in Openshift
 - Fuse Integration Services
- Deploy in any other Cloud
 - Azure, Google, ...

WAR C



WAR B



WAR A



JBoss/Wildfly Server

Service C



Service A



Service B



Standalone Services

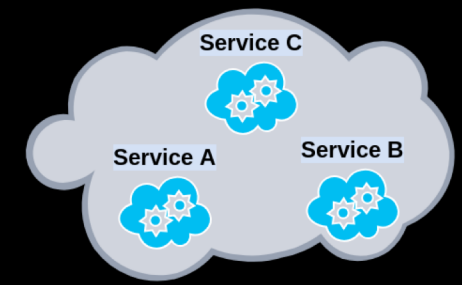
Service C



Service A



Service B



Openshift Services

Container C



Container A



Container B



Docker / Docker Compose

Service A



Service B



Service C



VM Service A



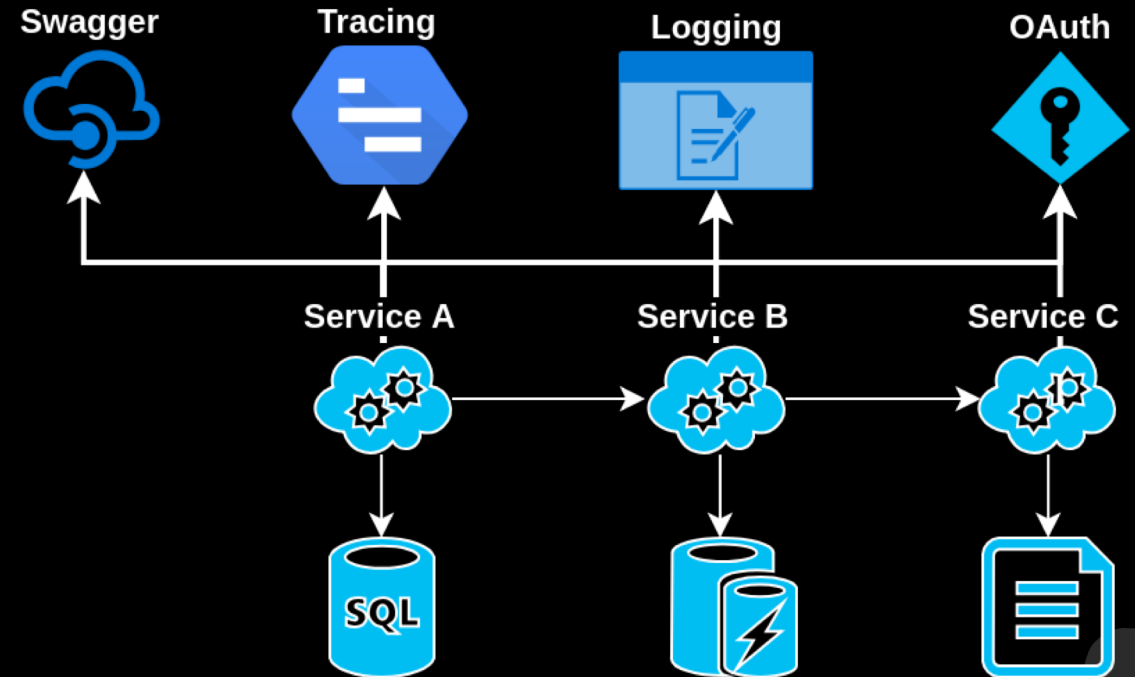
VM Service B



VM Service C

Management with Thorntail.io

- Support provided by Fractions
- No custom code
- Only configuration necessary, and annotations
- Still an ordinary WAR archive!!



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Questions?

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