

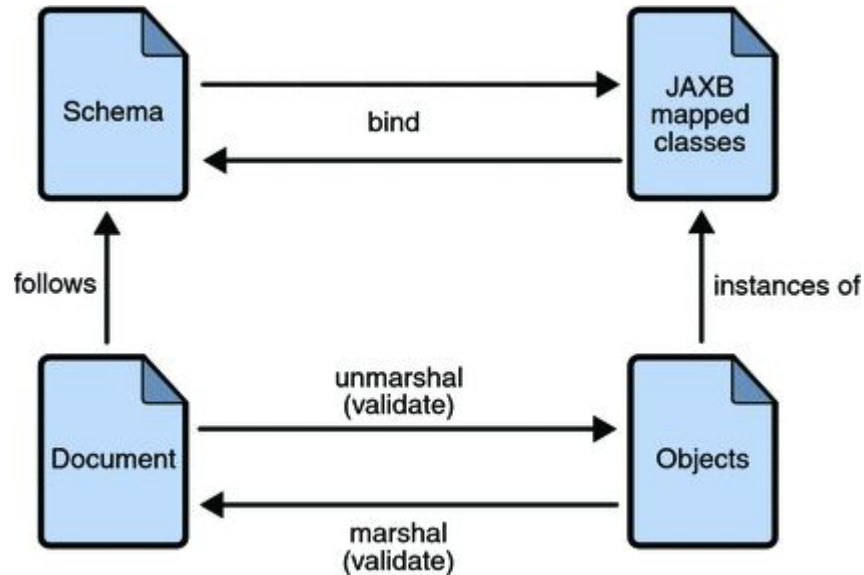
Lot 5 : Advanced modules of Jakarta EE stack Day 3

Training @FPS on November 17th 2020

Agenda

1. Day 2 recap
2. JAXB
3. SOA
4. JAX-WS

Java Architecture for Xml Binding



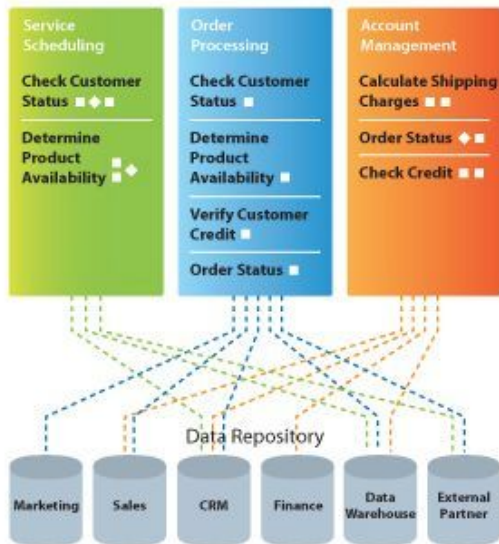
Workshop on JAXB



Before SOA

Closed - Monolithic - Brittle

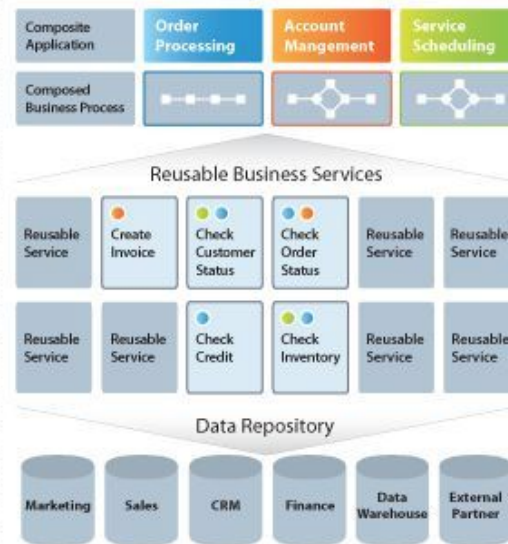
Application Dependent Business Functions



After SOA

Shared services - Collaborative - Interoperable - Integrated

Composite Applications



A Brief History of Web Service



RPC

- Remote Procedure Call
- Simplifies network programming

CORBA

- Cross-platform RPC

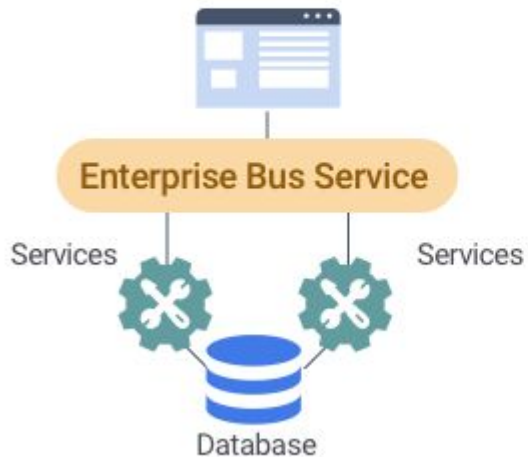
(Traditional) Web Services

- Cross-platform RPC over HTTP
- SOAP – *complex and not efficient*

RESTful Web Services

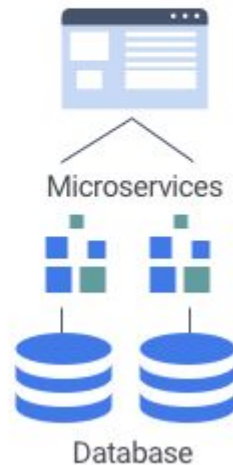
SOA vs Microservices

Service Oriented Architecture



Vs

Microservices

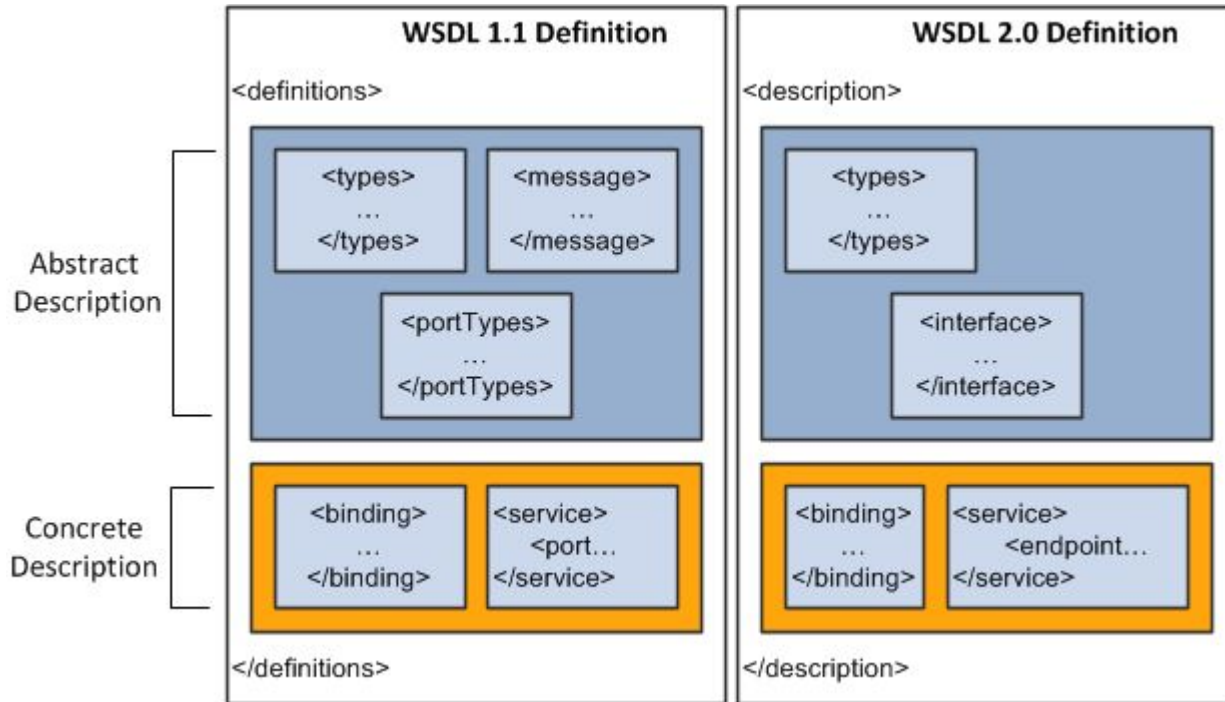


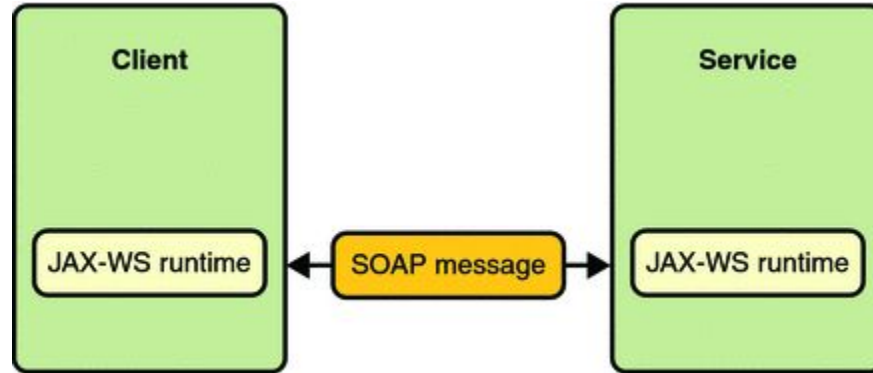
Overview of SOAP

- Simple Object Access Protocol
- Is a type of Web Service
- Invented at Microsoft, now a standard at W3C
- Communication between Client and Server over HTTP
- Language XML is used for Requests are made via URL
- No browser involved

WebServices Description Language

- Contract definition
- Reference manual for WS
- XML document





JAX WS

- Java API for XML based Web Services, part of JEE8
- Specification : <http://jcp.org/en/jsr/detail?id=224>
- Service Definition done in Java
- On server side : Generates the web service and its WSDL
- On client side : Write Java calls without needing to deal with the WSDL

Arquillian



Credit : https://docs.jboss.org/arquillian/reference/1.0.0.Alpha2/en-US/html_single/

Workshop on JAX-WS