

RODA Infrastructure for Data and Metadata

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Data & Metadata

- RODA = Romanian Social Data Archive, Bucharest
- Currently: less than 100 Codebooks (Nesstar) and associated datasets (SPSS)
- Project Goals:
 - collect new data and metadata from Romanian public institutions and private organisations (doubling the archive contents after 2 years)
 - migrate existing data to DDI-Lifecycle

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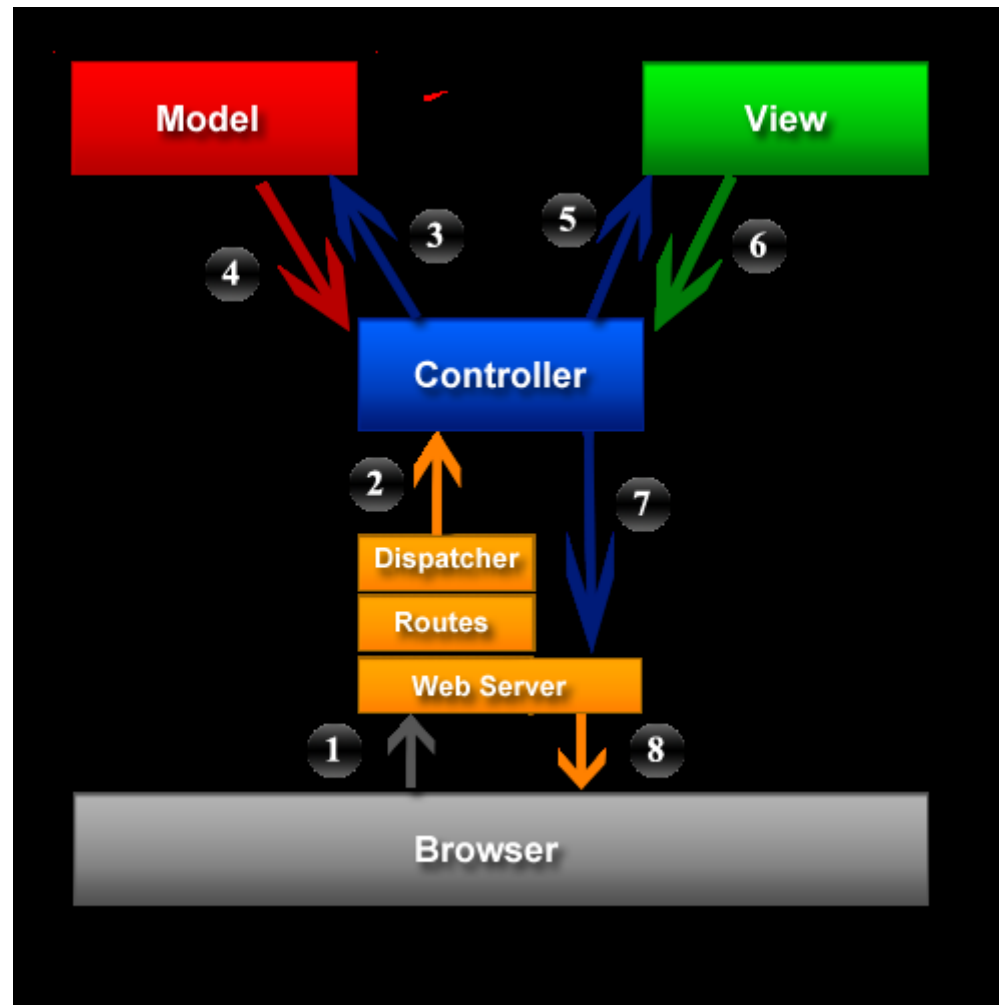
Software Solution (1)

- Open-source solution
- Reusable extendable modules
- Data Model implementing DDI-Codebook and a subset of DDI-Lifecycle
- We are developing a multi-tier web application
 - Complemented by other dedicated applications (CRM, DMS, Search)

Software Solution (2)

- Security-aware Application:
 - users, roles
 - multiple authentication methods
 - authorization (ACL)
- Multiple persistence back-ends:
 - RDBMS
 - XML
- Indexing/Searching metadata
- CESSDA requirements for future integration:
Shibboleth authentication, harvester access

Model-View-Controller pattern



Spring Framework

Spring Framework Runtime

Data Access/Integration

JDBC

ORM

OXM

JMS

Transactions

Web

(MVC / Remoting)

Web

Servlet

Portlet

Struts

AOP

Aspects

Instrumentation

Core Container

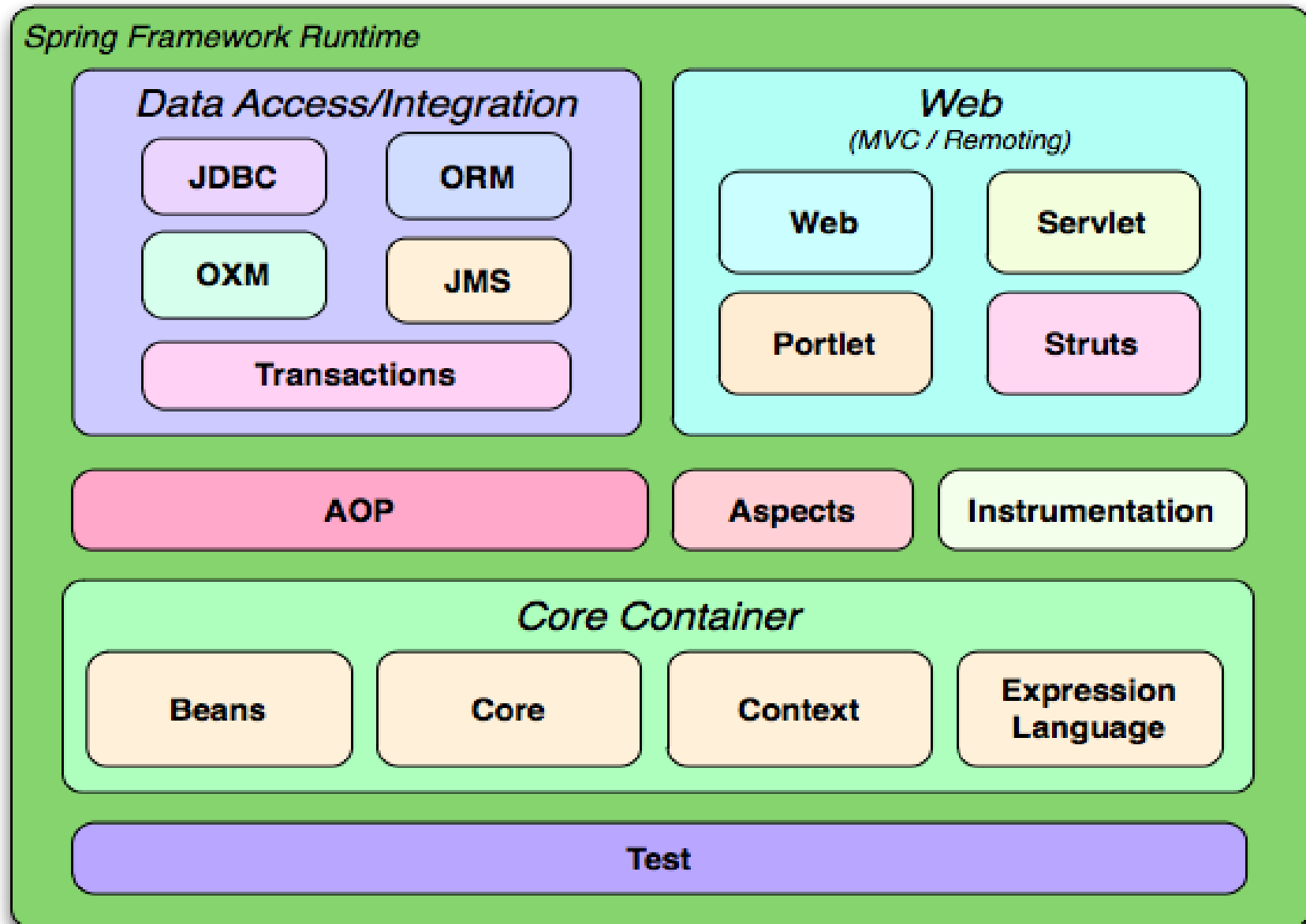
Beans

Core

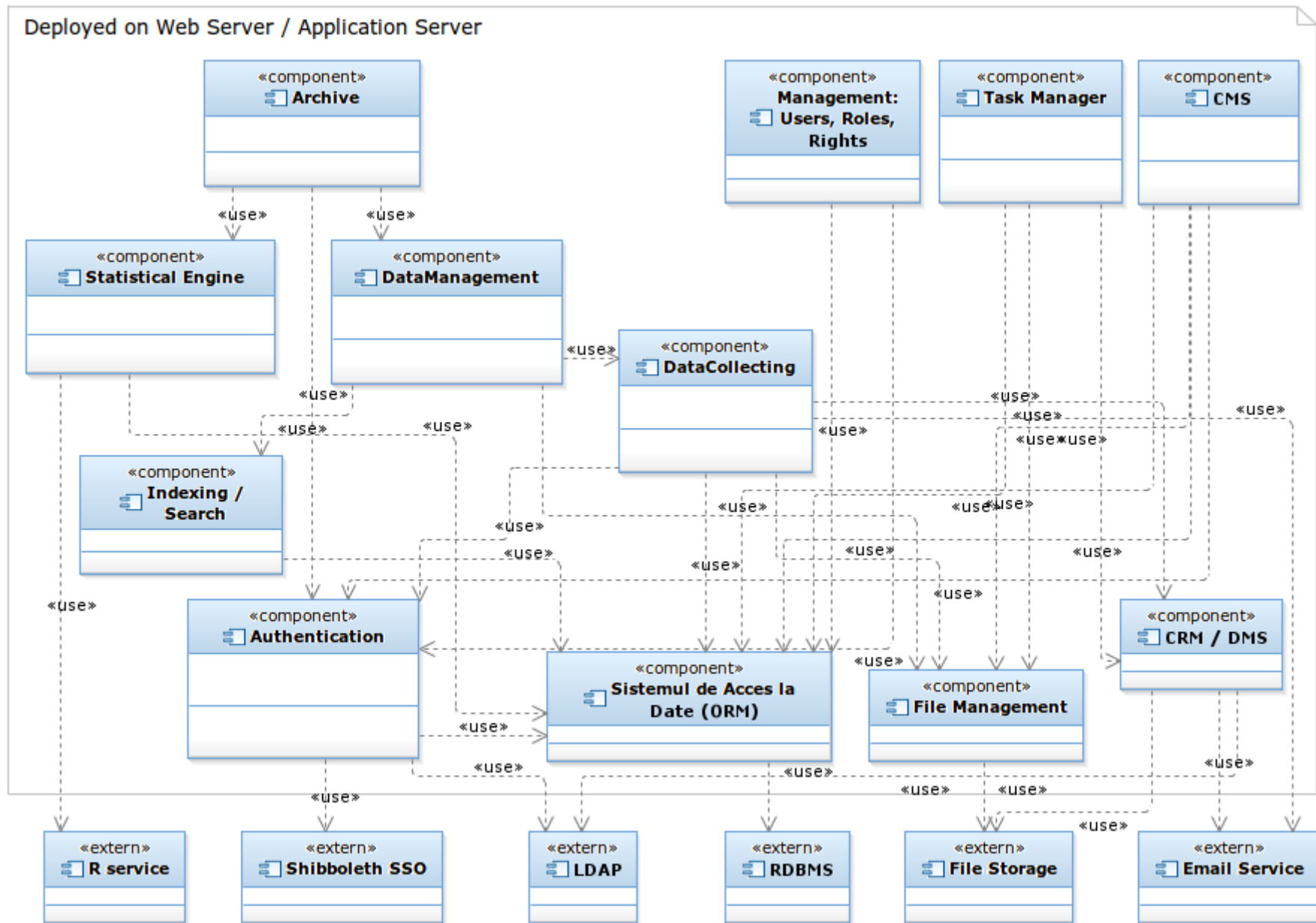
Context

Expression
Language

Test



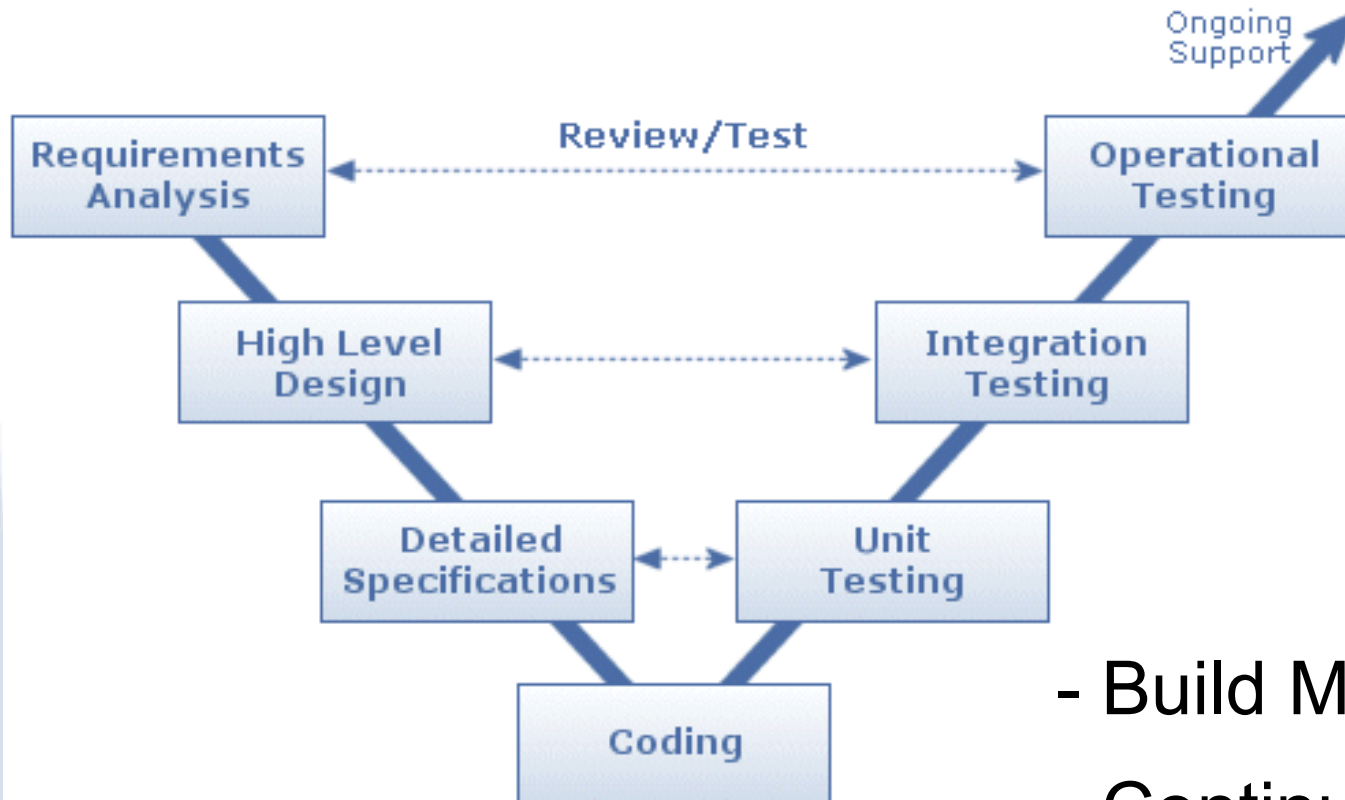
UML Component Diagram



Hardware

- Storage Server
- Database Servers
- Web Server
- Email Server
- **Backup Server**
- Workstations
- Laptops
- Tablets
- Network equipments
- Printing equipments

Quality Assurance

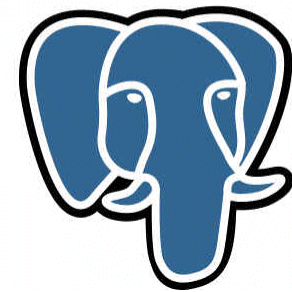


- Build Manager
- Continuous Build System
- trac
- SVN
- etc.

Proposed Technologies



PostgreSQL



Closing Remarks

- RODA is dedicated to open-source software
 - Willingness to share, test, reuse, contribute
 - Modular application design
- Data Model (Java) for DDI standards can be a shared asset
- We can later share encountered problems and best practices in both software development and data migration processes

