



RODA

An Integrated, Open Source Data Archiving System

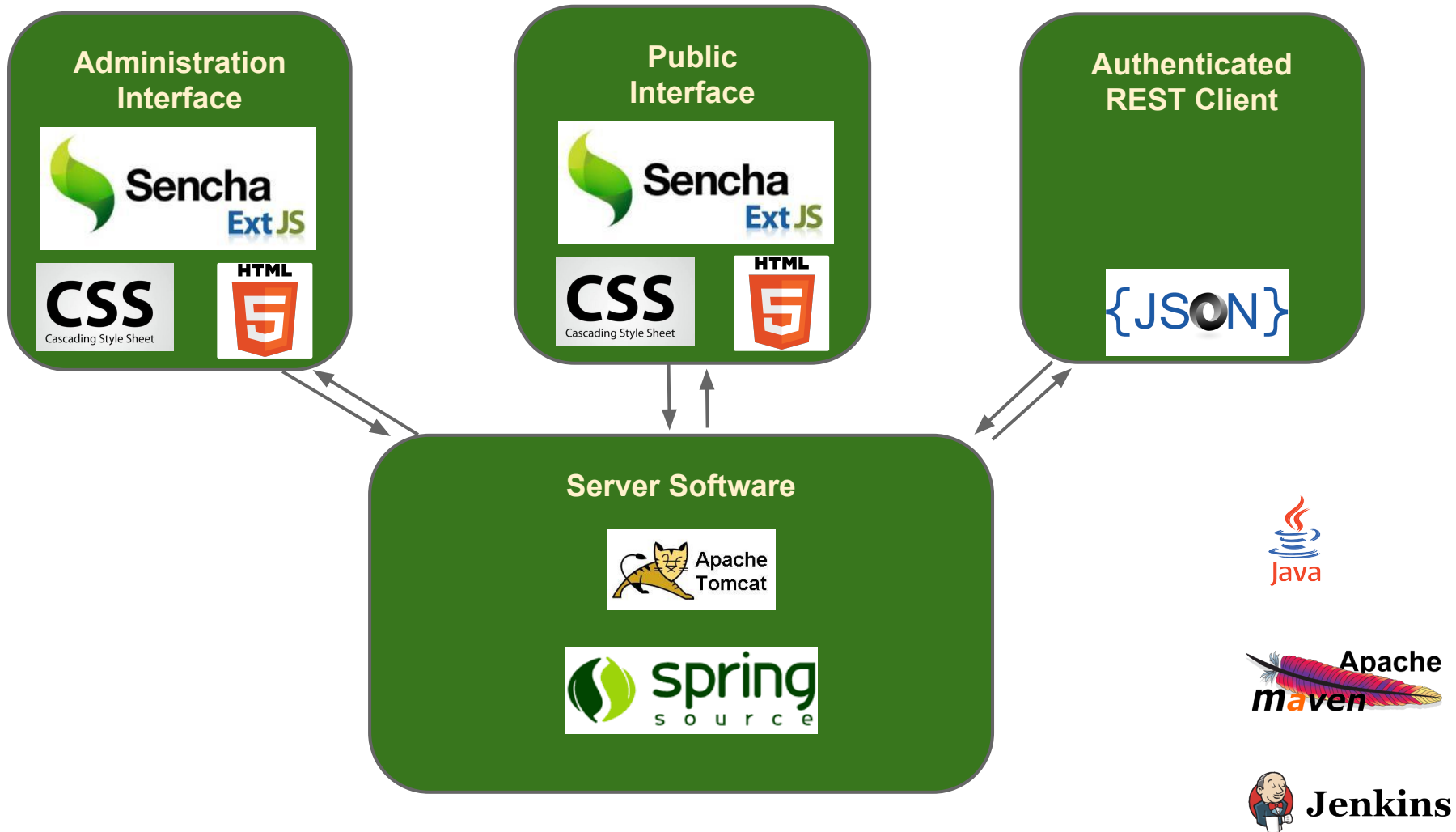
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Issues

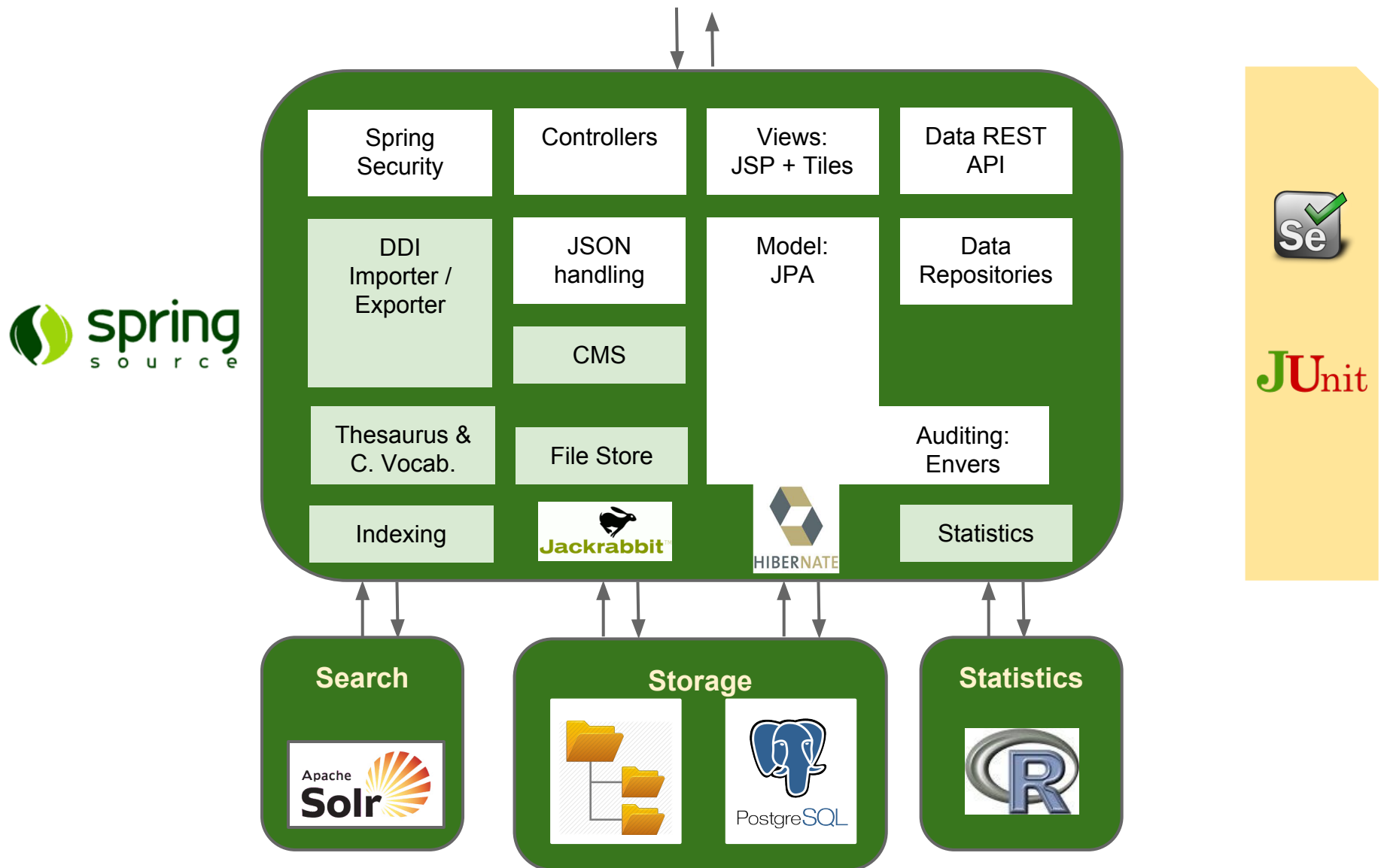
- 2001 - first version of the RODA website
 - employed Nesstar as a web platform
 - website and Nesstar separate, but working together
 - Access Control notoriously difficult using RDF
 - Nesstar working on Windows only
- 2004 - first attempt to upgrade the RODA system
 - didn't manage to secure funding
- 2007 - CESSDA made it to ESFRI roadmap
- 2010 - first PPP funded project
- 2012 - RODA won a grant worth about half million euro, funded by the Ministry of National Education, under the Sectorial Plan (project number 5S/2012)
- 2014 - end of the project, first version of the system ready

Objectives

- complete data archiving system (for all SIP, AIP and DIP of the OAIS)
- 100% open source
- 100% web based
- OS independent
- modular and extensible
- DDI ready (both Codebook and Lifecycle)
- import and export various formats (proprietary and open)
- basic descriptives using R as a statistical engine
- flexible access control
- auditable and versionable
- part of the data structured using SQL



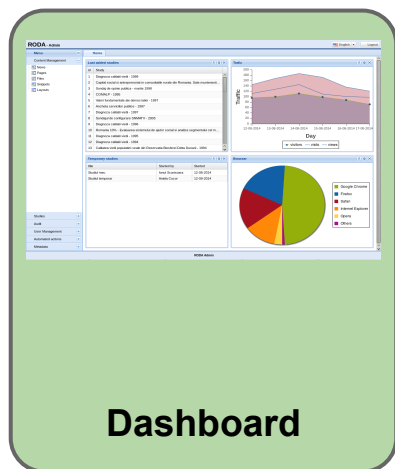
Current Server-side Technology at RODA



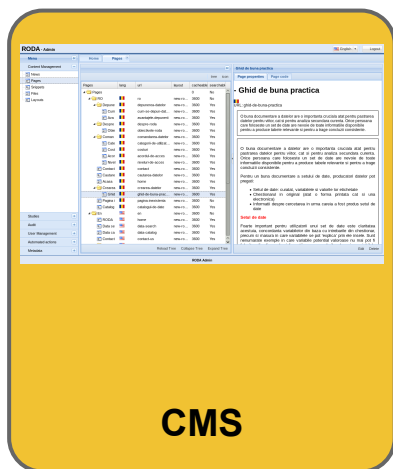
We made sure to hit most of the right buzzwords... HTML5 included

- Rich Web application (Javascript)
- AJAX
- Client local storage
- Drag-and-drop
- SVG
- CSS3
- JSON
- REST

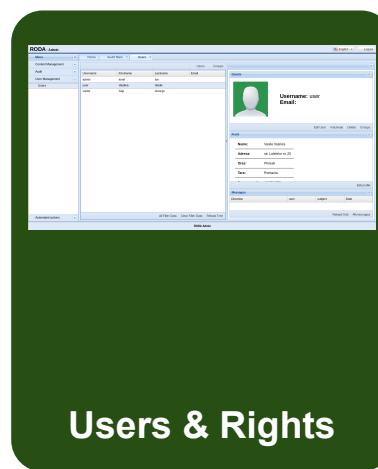
Administration Interface



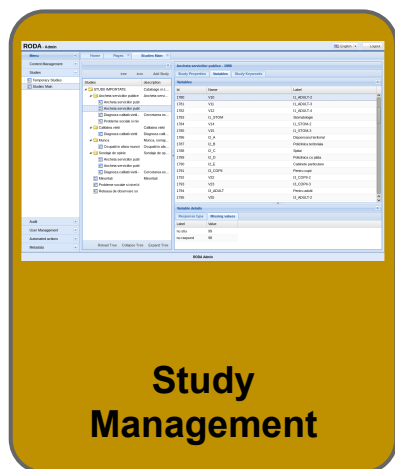
Dashboard



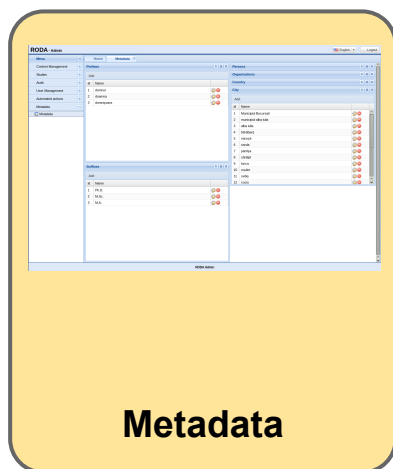
CMS



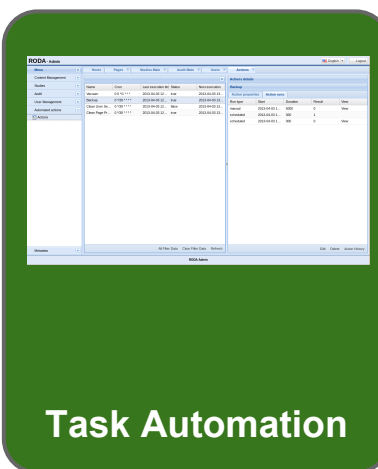
Users & Rights



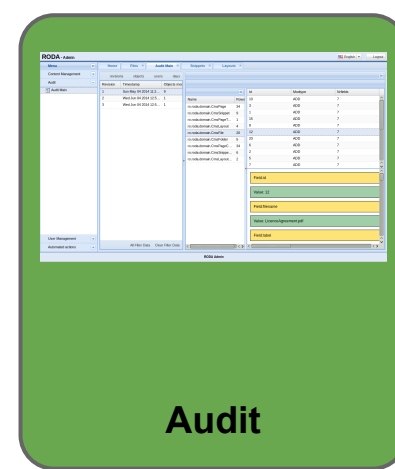
Study Management



Metadata



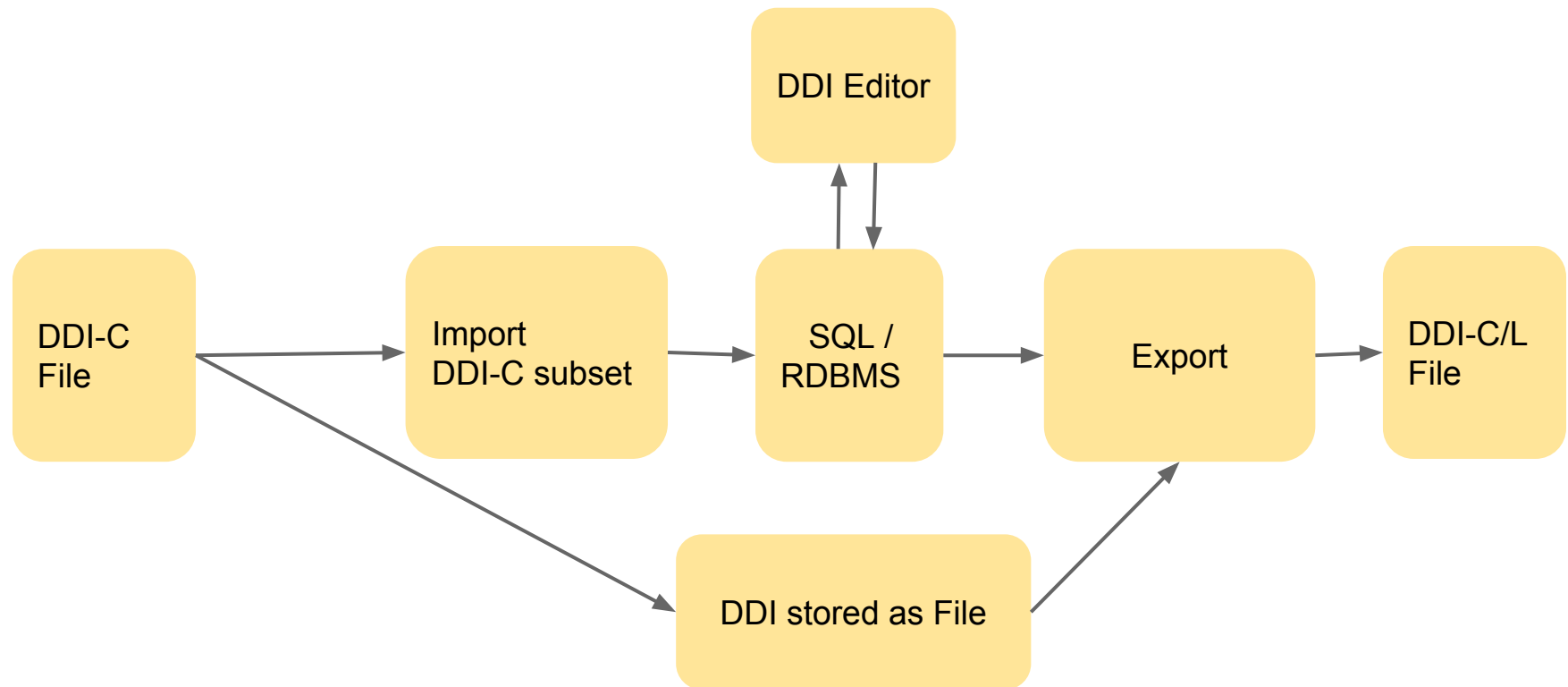
Task Automation



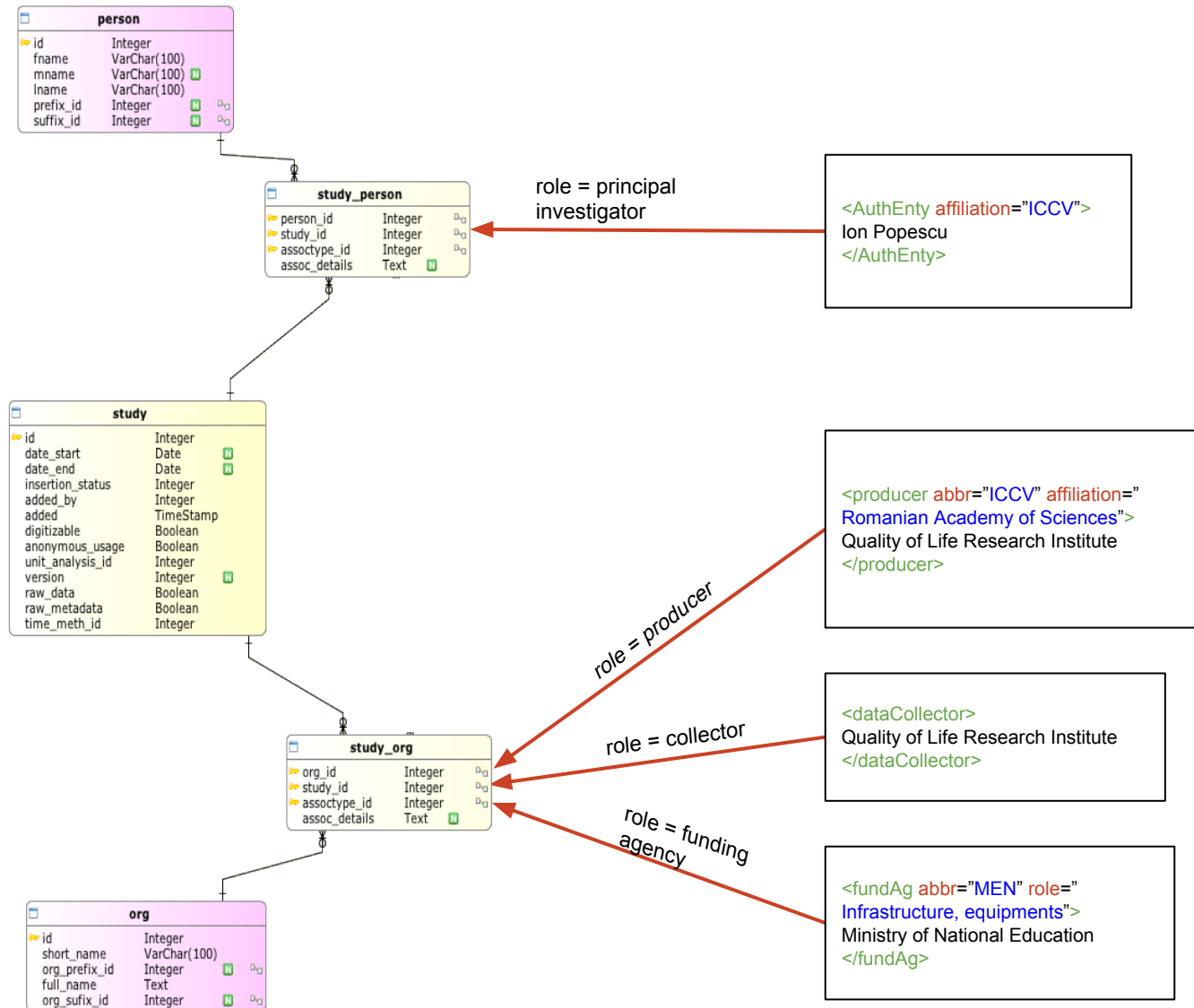
Audit

Final storage of social studies is SQL + XML

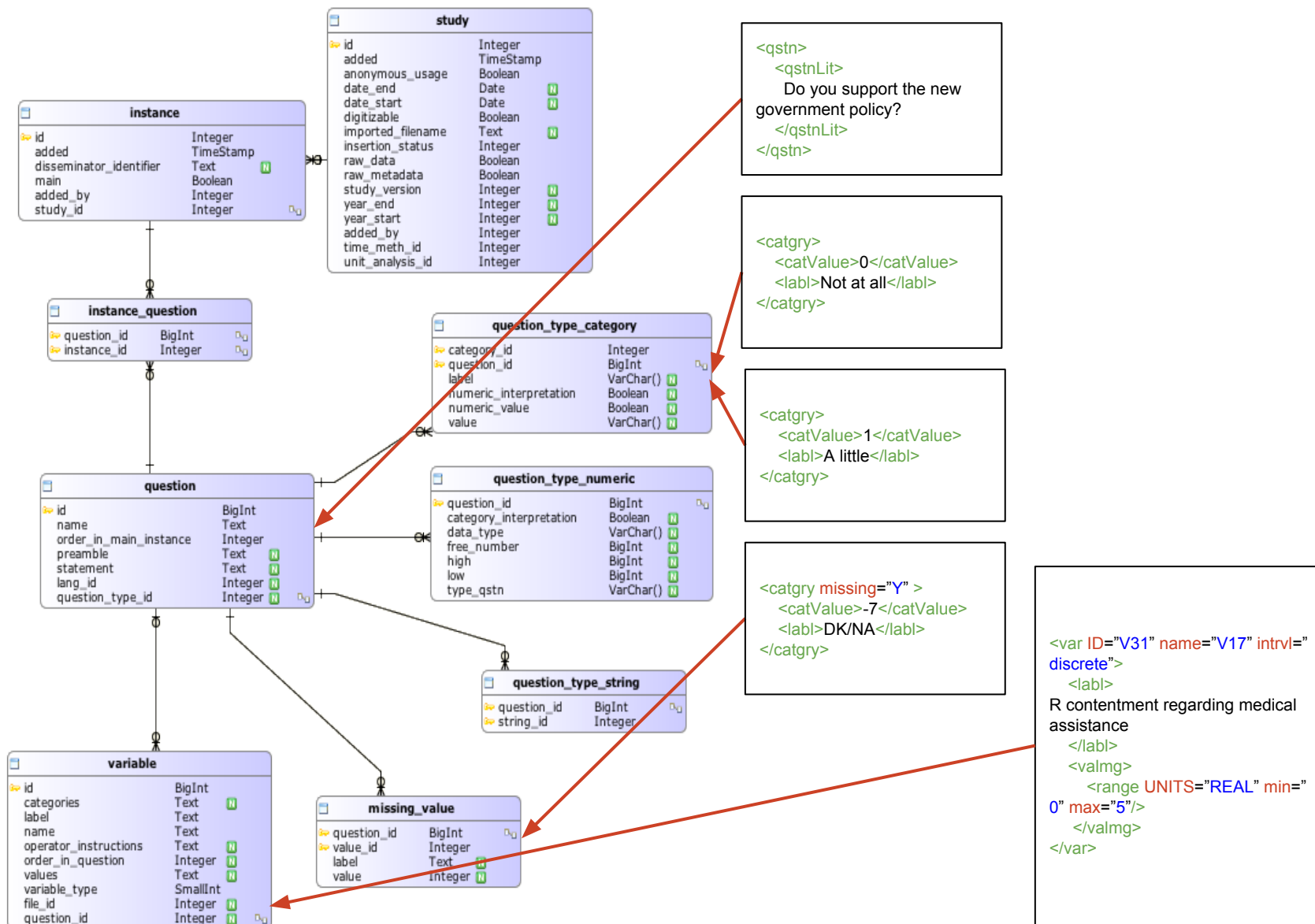
SQL holds a large subset of DDI



Data Storage



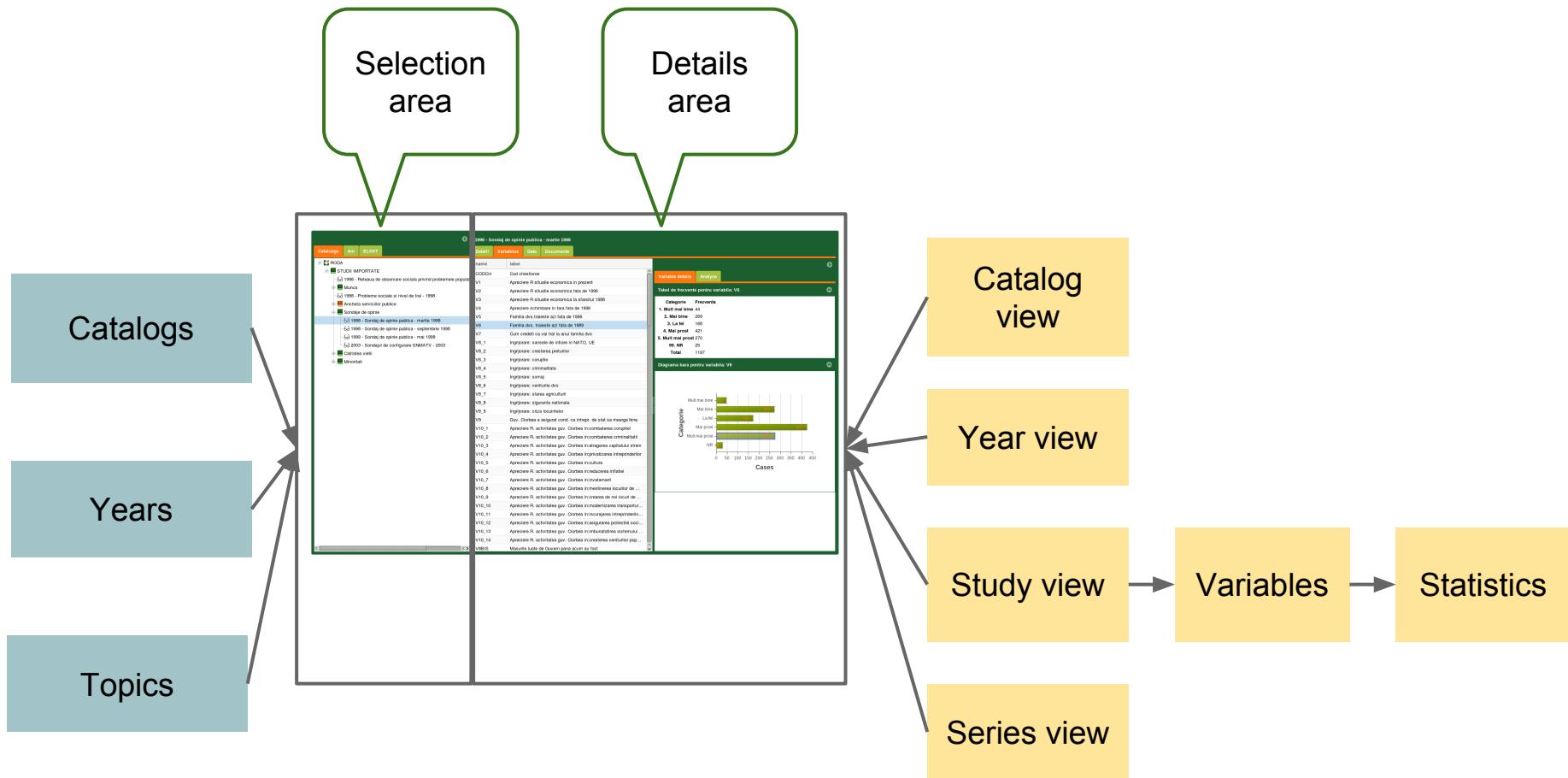
Data Storage

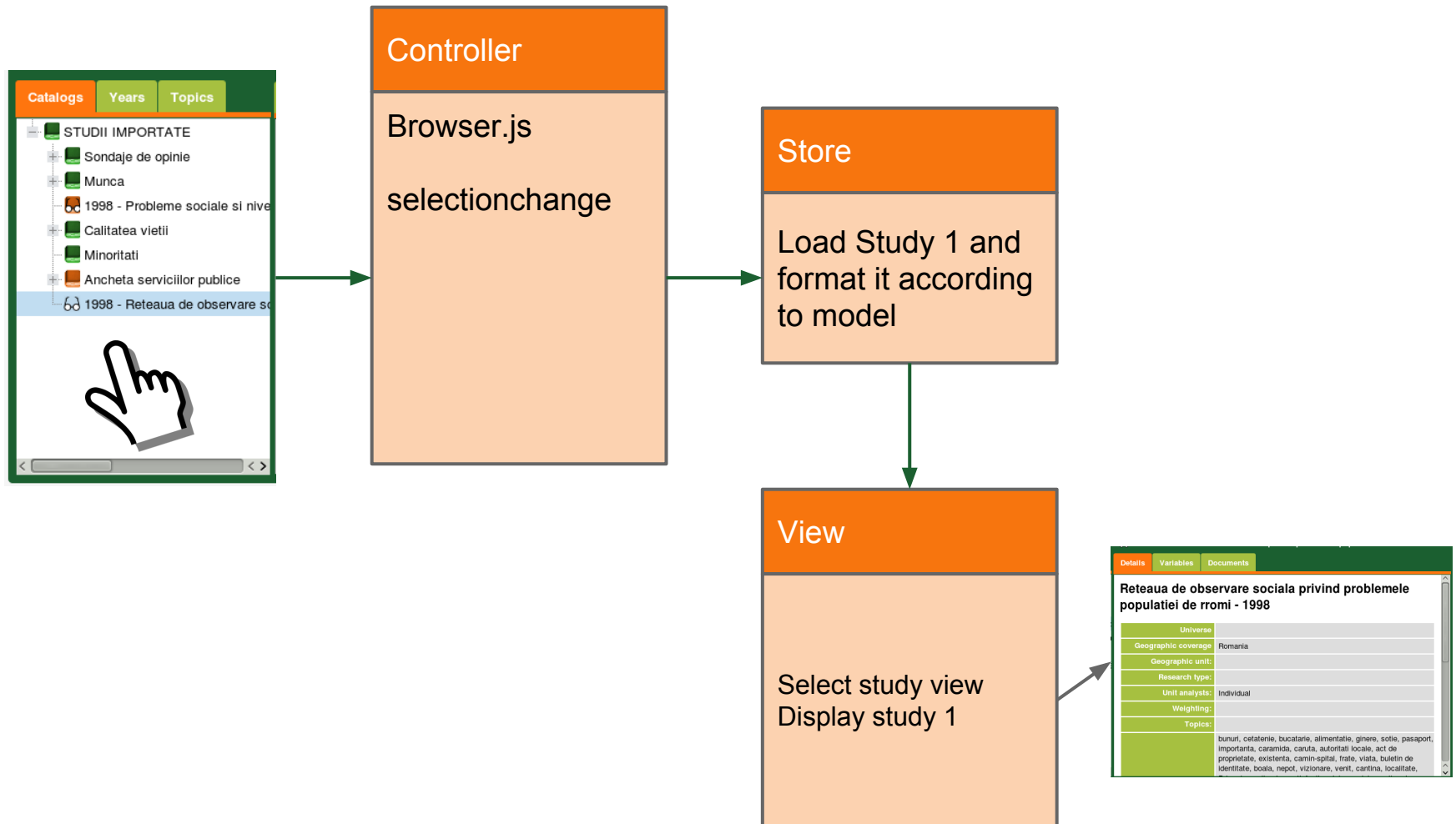


Controller:	Functions that are executed on various events and interactions
Model:	Structure of data received from server
View:	Dialog (visual component, widget)

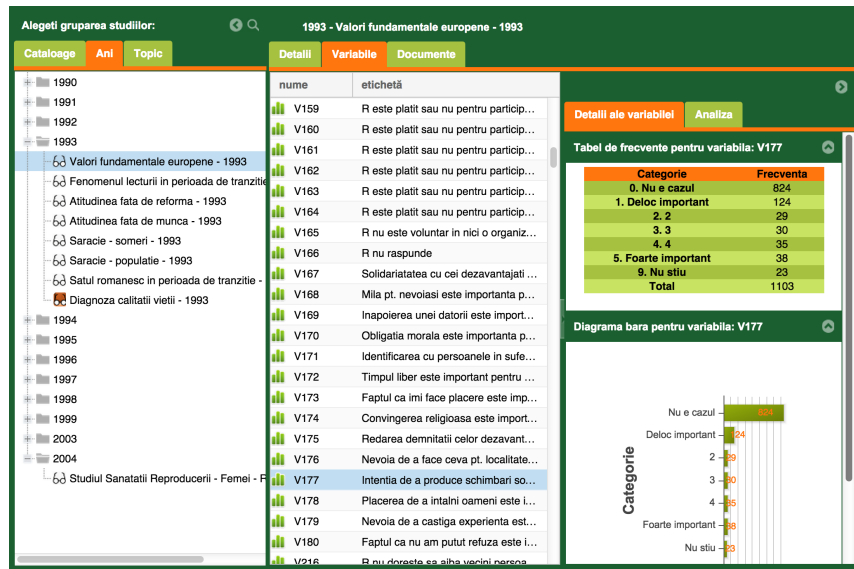
Controller	Model	View 
Abstract.js Browser.js CatalogView.js DataBrowser.js History.js Search.js VariableView.js YearView.js	CatalogsModel.js CatalogsTreeModel.js FrequencyModel.js SeriesModel.js StudyFileModel.js StudyKeywordModel.js StudyModel.js StudyOrgModel.js StudyPersonModel.js StudyTopicModel.js TopicTreeModel.js VariableModel.js YearModel.js YearsTreeModel.js	Browser.js CancelSave.js CatalogView.js DBCard.js DataBrowserPanel.js DetailsPanel.js SeriesView.js StackedBarChart.js StudySeriesView.js StudyView.js VariableDetails.js VariableView.js Viewport.js YearView.js

Public Interface

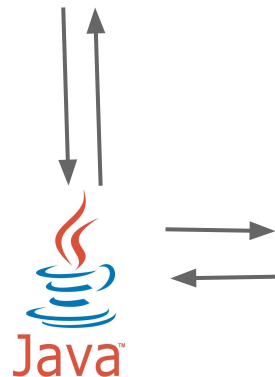




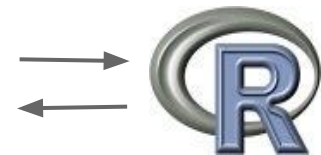
Statistical Engine



The user interacts with the statistical engine through the data access user interface



rJava / JRI
(Java Native Interface)



An open source statistical programming environment

Release Roadmap

Version beta in the first trimester of 2015

Source code published on GitHub with an open source public licence, first semester 2015

<http://www.roda.ro/en>

RODA - Romanian Social Data Archive

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