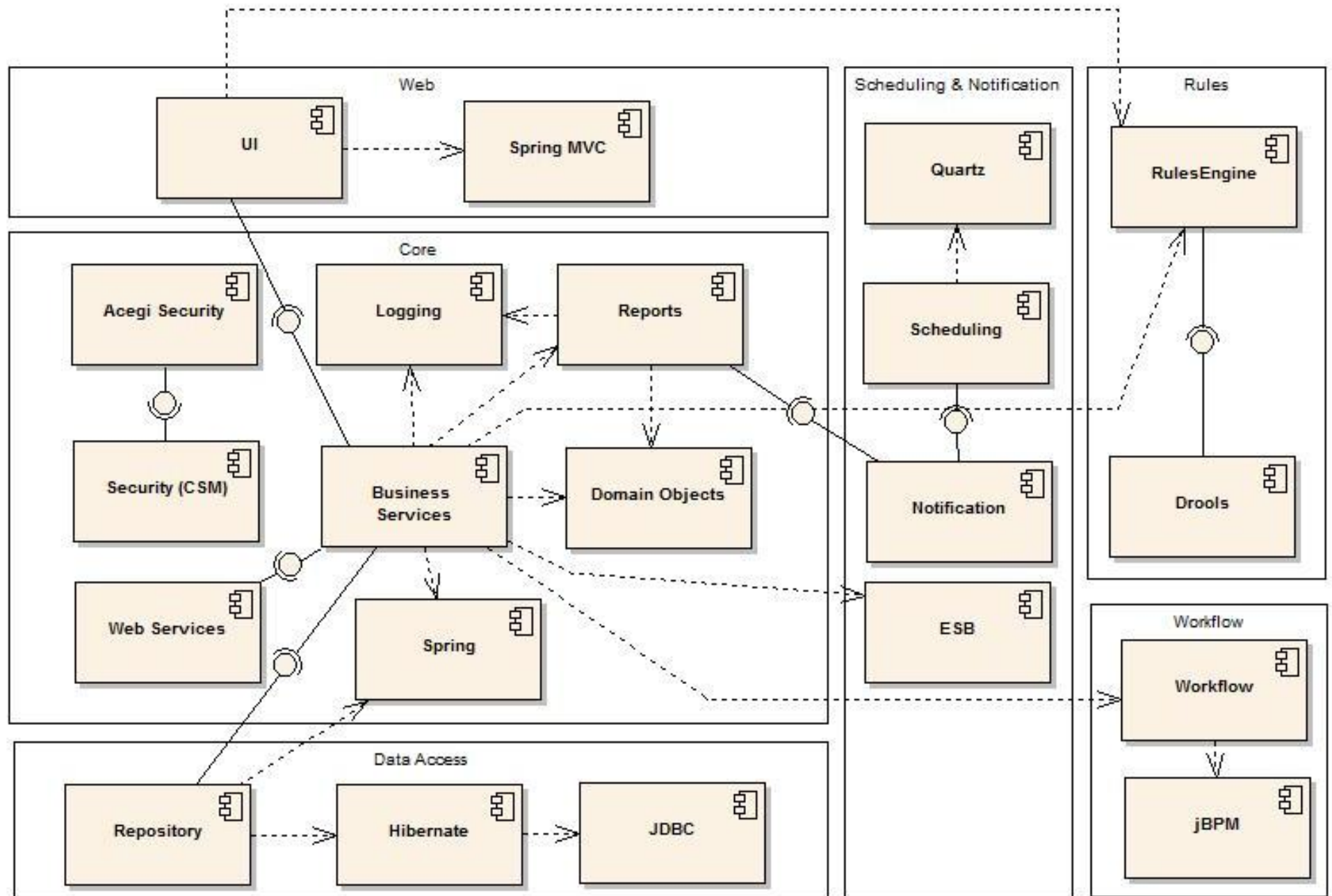
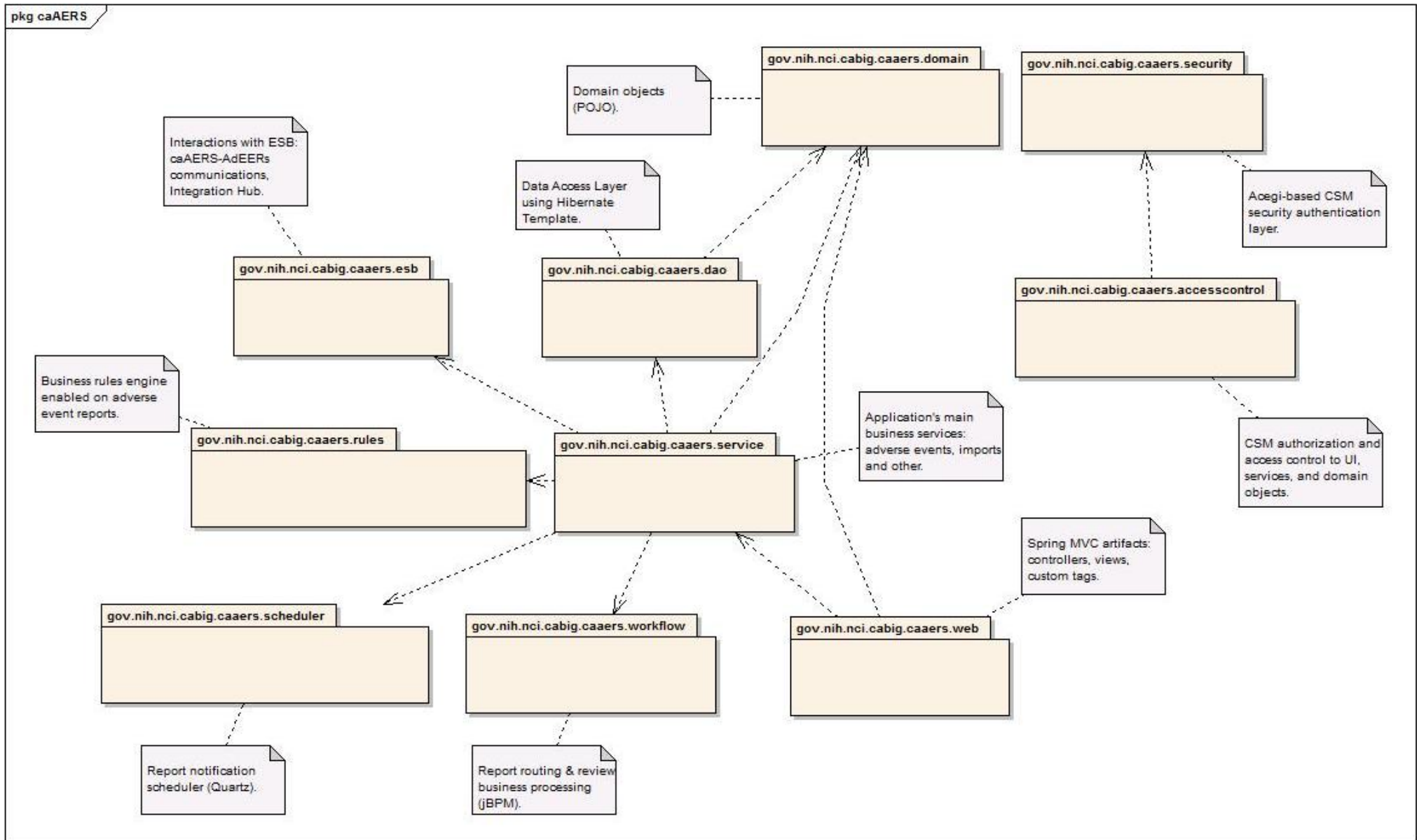


Components

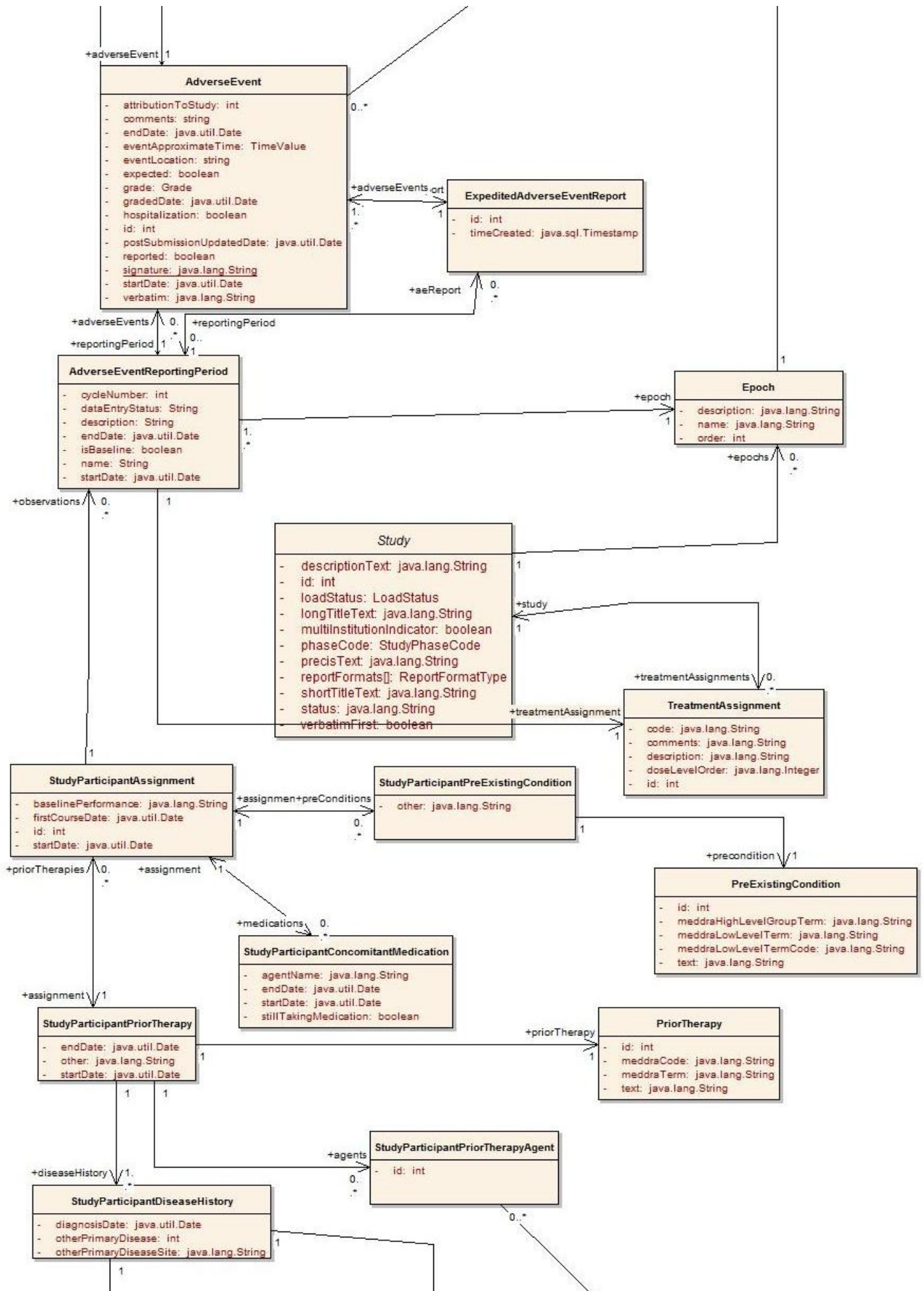
cmp caAERS Components



Packages

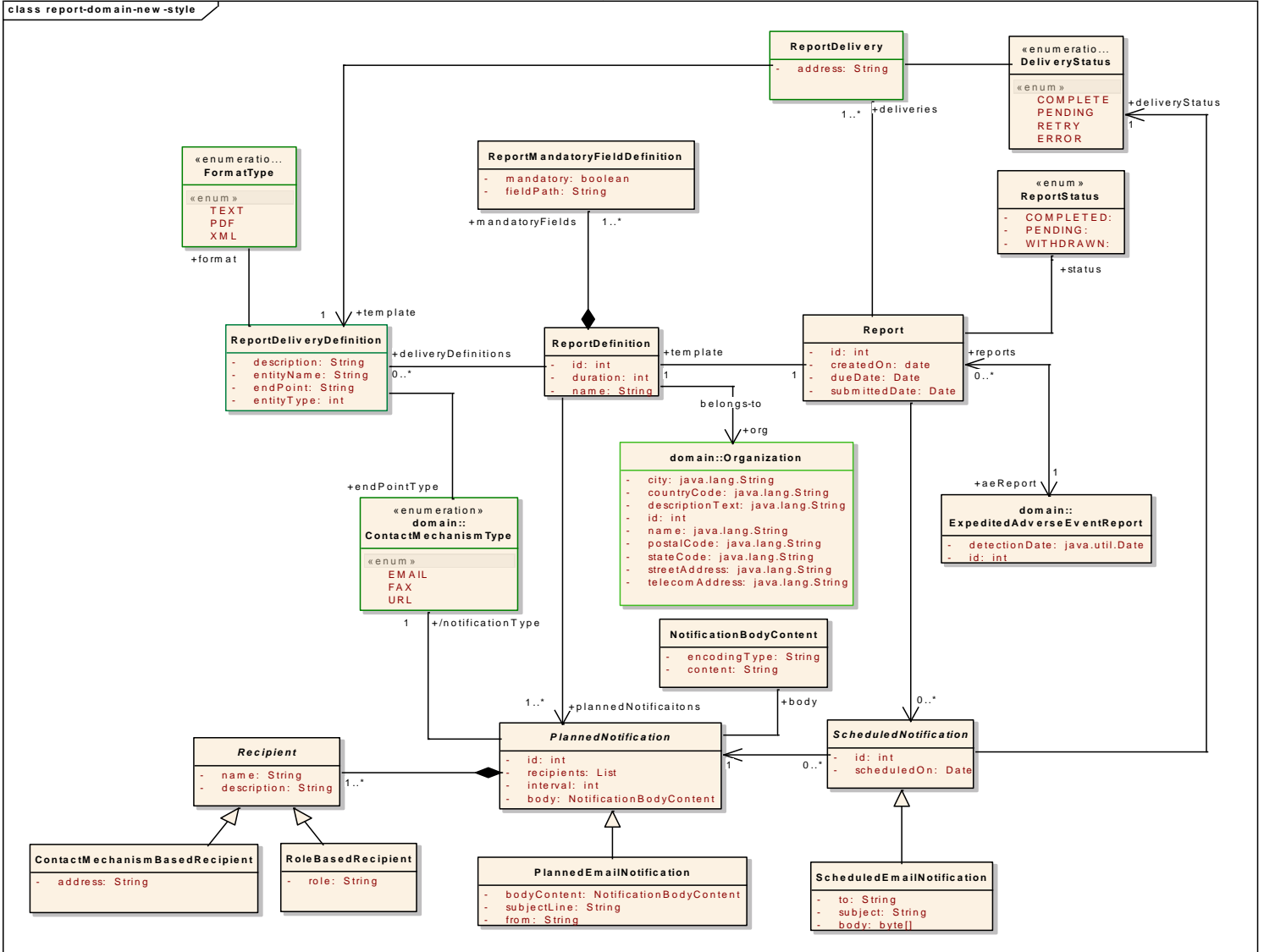


Adverse Events Domain

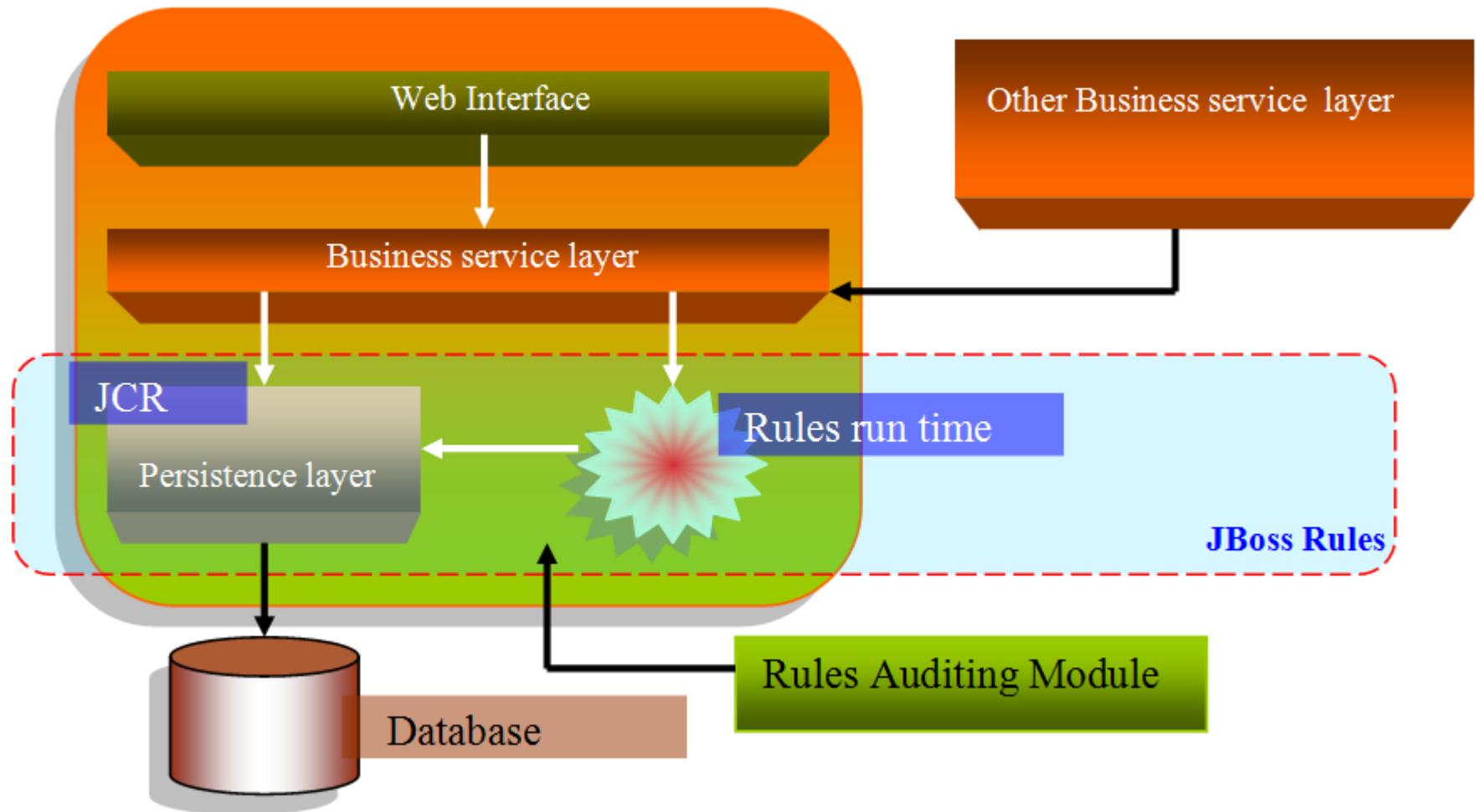


Reports Domain

class report-domain-new-style

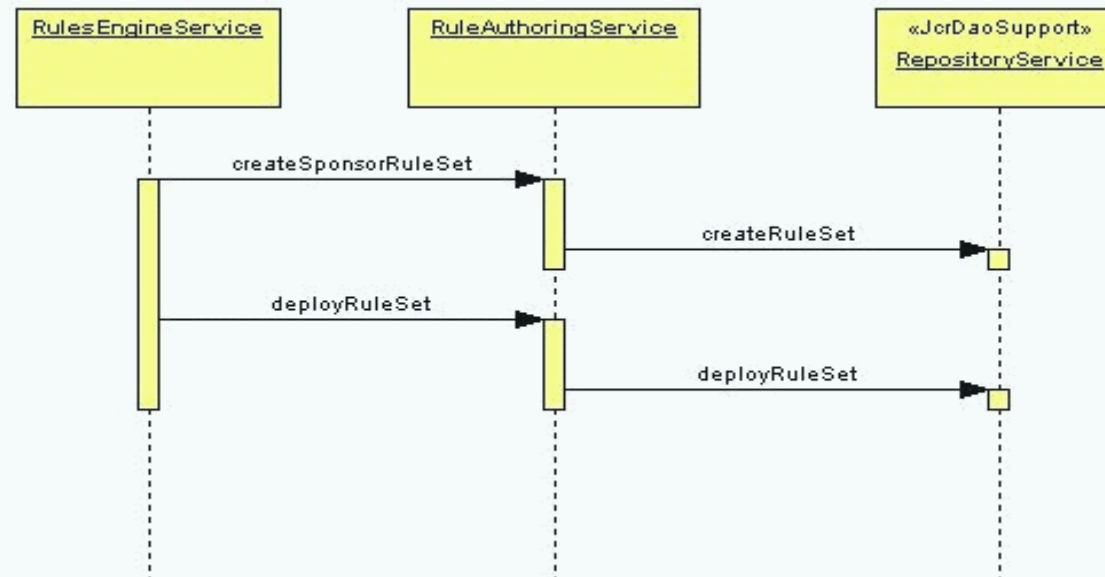


Business Rules Architecture

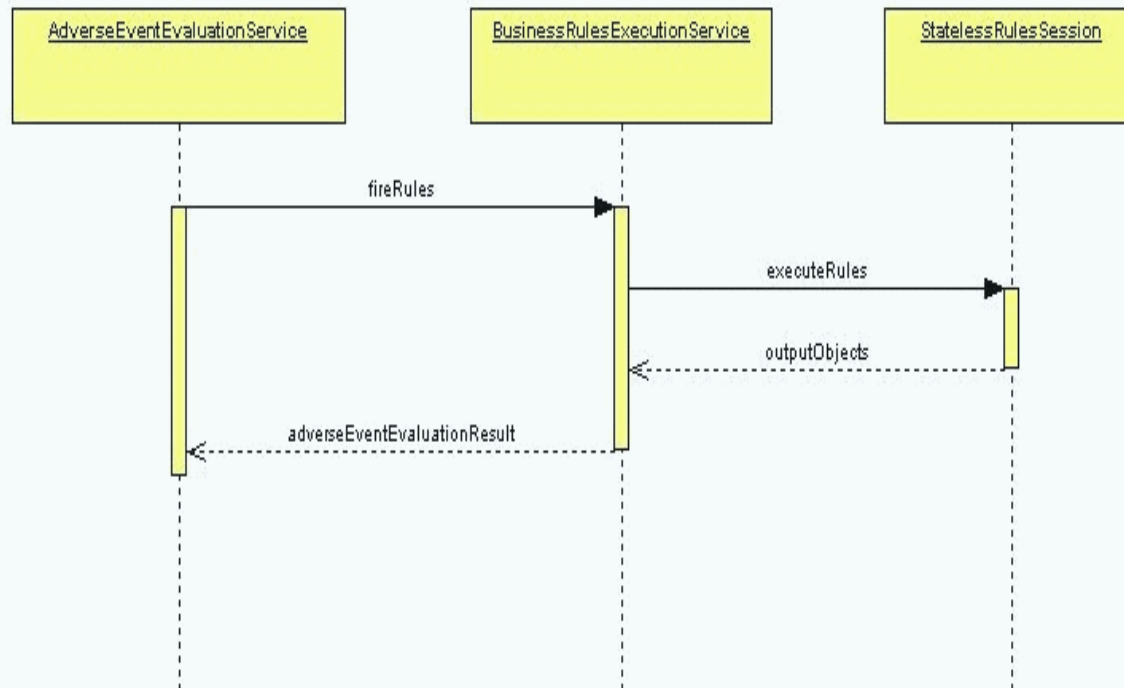


Business Rules Processing

Creation & Deployment

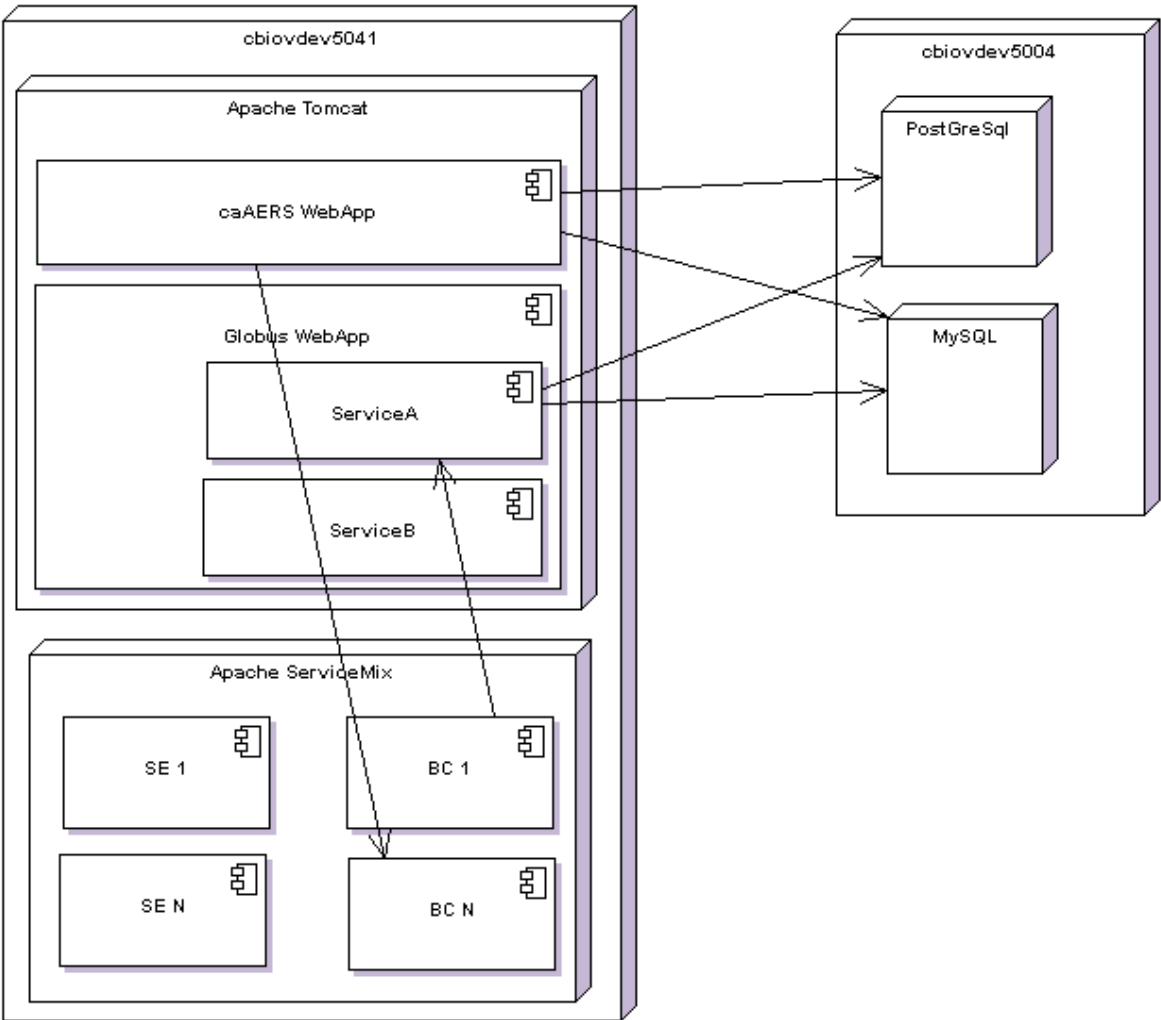


Execution



Deployment Diagram

deployment Deployment Model



Requirement/Solution Matrix

Requirement	Motivation & Challenges	Solution	Technology	Reasoning
Portability & Platform-Independence Portability	<ul style="list-style-type: none"> Run reliably on all major platforms and databases 	Platform-independent language & ORM framework	Java/Hibernate	<ul style="list-style-type: none"> Proved platform-independence Portability across databases with little or no changes.
Adverse Event Reporting Business Rules Module 1d	<ul style="list-style-type: none"> Very adaptive to changes in business. Rapid provisioning. Domain-specific authoring of rules. Decoupled from Java source code 	Rules Engine	Drools	<ul style="list-style-type: none"> Spring integration Open-source Strong financial backing Large community
Report Routing & Review Module 5	<ul style="list-style-type: none"> Very adaptive to individual organization's needs for report review process. Platform-independent authoring Decoupled from Java source code 	Workflow Engine	jBPM	<ul style="list-style-type: none"> Integration with Spring Hibernate, databases Open-source Strong financial backing Large community Multiple process definition languages
Adverse Event Capture & Reporting Module 1a	<ul style="list-style-type: none"> Run notifications on a given schedule Reliability (schedule survives server restarts and crashes) Flexible way of describing the schedule 	Scheduling Engine	Quartz	<ul style="list-style-type: none"> Lightweight Integration with Spring and Hibernate Supports CRON syntax Uses database to persist jobs
External Agency Reporting Module 4	<ul style="list-style-type: none"> Conformance to reporting requirements of external agencies in a scalable manner. Decoupling from external systems' interfaces 	Enterprise Service Bus	Apache ServiceMix / iHub	<ul style="list-style-type: none"> Consistency: used already by the Suite Applications Standardization (JBI) Open-source
User Interface GUI Specification	<ul style="list-style-type: none"> UI should be pretty, responsive, and easy to use UI must create an impression of a desktop-like application and avoid unnecessary page refreshes UI must work across browsers 	Web 2.0	AJAX, YUI, Prototype, Scriptaculous	<ul style="list-style-type: none"> Cross-browser JavaScript support Rich widget collection Strong backing Open-source Large community