

WiseML is data formatting library designed to serialize, deserialize, persist and semantically annotate data from/to XML documents adhering to [WiseML schema definition](#) .

The WiseML library contains the following packages.

- *WiseML* parser based on [JibX](#) bindings. Use this package to marshal and unmarshal the Setup, Scenario and Trace data from/to a wiseml document.
- *WiseConfig* parser based on [JibX](#) bindings. This package provides methods for serializing and deserializing the configuration set of a [estbed Runtime](#) instance.
- *WiseDB* O/RM persistence based on [Hibernate](#) . Using the WiseML model this package persists data to an RDBMS. It also uses [ehcache](#) for providing second level caching for several data tables.
- *WiseRDF* mappings based on [Jena](#) framework. Use this package in order to provide semantic annotation on wiseml entities.

### Technologies

- [Java™](#) the well known object oriented language.
- [JibX](#) is one of the fastest XML object mapping frameworks out there (check out this performance test). Furthermore, it is very flexible in binding XML structures to objects.
- [Hibernate](#) is probably the most well establish relational persistence framework for Java. Hibernate facilitates the storage and retrieval of Java domain objects via Object/Relational Mapping (ORM).
- [ehcache](#) is an open source, standards-based cache used to boost performance, offload the database and simplify scalability. Ehcache is robust, proven and full-featured and this has made it the most widely-used Java-based cache.
- [Jena](#) is a Java framework for building Semantic Web applications. It provides a programmatic environment for RDF, RDFS and OWL, SPARQL and includes a rule-based inference engine.
- [Apache Maven](#) is a software project management and comprehension tool. Based on the concept of a project object model (POM), Maven can manage a project's build, reporting and documentation from a central piece of information.

