



RDF Framework

Interoperability

Sesame is a framework for storage and retrieval of RDF metadata. It provides interoperability: metadata of multiple sources can be integrated and stored in Sesame and can be queried using powerful query languages.

"The Resource Description Framework (RDF) integrates a variety of applications from library catalogs and world-wide directories to syndication and aggregation of news, software, and content to personal collections of music, photos, and events using XML as an interchange syntax. The RDF specifications provide a lightweight ontology system to support the exchange of knowledge on the Web." [quote from W3C]



Overview

- Framework for storing, parsing and querying RDF.
- Support for different DBMS's: MySQL PostgreSQL, Oracle, MS SQL Server.
- Connectivity with ontology editors is provided by plug-ins for Protégé, OntoEdit, OILEd and IsaViz.
- Unrivalled upload and query performance when using memory or native storage.
- Flexible access API, which supports both local and remote access (through HTTP or RMI).
- Support for several query languages: RQL, RDQL, and SeRQL, of which the latter is the most powerful one.
- One of only a few RDF frameworks with full support for RDF Schema inferencing.
- Partial support for OWL inferencing.

Key advantages

Sesame is one of the most popular Semantic Web databases, supported by a fast growing community, and is available as open source software. Sesame offers several key advantages:

• **Reliability.** Sesame is developed and maintained by an active community. New versions of the software are extensively tested by this community before release.

• Flexibility. Sesame has been designed with flexibility in mind. Its unique multistorage support architecture allows it to be deployed on top of a variety of storage systems, like relational databases, main memory, file systems and keyword indexers.

• **Performance and scalability.** Sesame's multi-storage support architecture gives developers the opportunity to transparently choose the ideal trade-off between performance and scalability.

• **Open source.** By providing ready access to source code, Sesame's approach ensures freedom, thereby preventing lock-in to a single company or platform. Also, the Sesame community is committed to provide full standards compliance with all relevant, current and future specifications.

> openRDF.org is the home of Sesame. It offers documentation, download links, an issue tracker and a forum.

openRDF.org



Sesame feature list

Version	1.1 (September 2004)
Platforms	All Java 2 (1.4 or newer) enabled platforms (Windows, Linux, MaxOS X, Solaris, etc.).
Languages	RDF, RDF Schema, OWL
Reasoning support	Full RDF Schema entailment support (W3C REC 10 Feb 2004) and partial OWL entailment support
Query languages	SeRQL, RQL, RDQL
Storage	Native (file system), RDBMS, main memory
I/O	Rio (RDF I/O) toolkit, a compact and fast set of parser and writers, supports: - RDF/XML - N-Triples - Turtle
Upload performance	- RDBMS: ~ 1,400 triples/sec - Native (disk): ~ 7,000 triples/sec - Memory: ~39,000 triples/sec (Measured on Dual Athlon 1800 with 1024MB RAM)
Scalability	Tested up to 35 million triples in a commercial application, but can scale to larger numbers
Interfaces	HTTP, RMI, Java 2 API, Python (3rd party), Delphi (3rd party), SWI Prolog (3rd party)
Plugin support	OILEd, OntoEdit, Protégé 2.1, IsaViz
Character set support	Full Unicode support
Security	User-based read/write access, HTTPS communication
Support	Community supported (http://www.openrdf.org/), optionally commercial support through Aduna.
License	GNU Lesser General Public License (LGPL)

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