Swoogle is a crawler based search & retrieval system for semantic web documents (SWDs) in RDF, Owl and DAML. It discovers SWDs and computes their metadata and relations, and stores them in an IR system.

**SWD Properties**

Language and level; encoding, number of triples, defined classes, defined properties, & defined individuals; type (SWO, SWI); form (RSS, FOAF, P3P, ...); rank; weight; annotations; ...

**SWD Relations**

*Binary: R(D1,D2)*
- **IM**: D1 owl:imports D2
- **IMstar**: transitive closure of IM
- **EX**: D1 extends D2 by defining classes or properties subsumed by D2’s
- **PV**: owl:priorVersion & subproperties
- **TM**: D1 uses terms from D2
- **IN**: D1 uses individual defined in D2
- **MAP**: D1 maps some of its terms to D2’s
- **SIM**: D1 & D2 are similar
- **EQ**: D1 & D2 are identical
- **EQV**: D1 & D2 have the same triples

*Ternary: R(D1,D2,D3)*
- **MP3**: D1 maps a term from D2 to D3 using owl:sameClass, etc.

Swoogle uses two kinds of crawlers to discover semantic web documents and several analysis agents to compute metadata and relations among documents and ontologies. Metadata is stored in a relational DBMS.

**http://swoogle.umbc.edu/**

Swoogle v1 has ~12K SWDs & 100K relations. v2 will also catalog classes and properties and their metadata and have >1.6M SWDs.

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