Enticing – Semantic Search Engine

Overview
▶ Semantic search engine for KNOT.
▶ Searching based on the meaning of words.
▶ Powerful query language EQL.
▶ Scalable distributed system.
▶ Built on top of MG4J.

Components of the platform

Components built from 13 modules:
- Webserver
- IndexServer
- IndexBuilder
- ConsoleClient
- ManagementServer
Each of them can be replicated.
Currently running on over 50 servers.

EQL – Enticing Query Language
▶ Query entities and their attributes.
▶ Context constraints for paragraphs or sentences.
▶ Global constraints for relationships between entities.
▶ Compiler with extensible semantic analysis toolkit.

Other features
▶ Smart search bar.
  - Syntax and semantic analysis.
  - Detailed error messages.

Figure: Example of a semantic error

Performance measurements

Table: Early results of performance tests

Platform is still being optimized.

Current state
▶ Core implementation finished.
▶ Ongoing testing and optimizations.
▶ Many possible extensions.
  - Different indexing libraries.
  - Autocomplete for the search bar.
  - Native mobile client.

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