REFLECTIVE LOGIC - A NEW METHOD OF QUERYING A GRAPH DATABASE

**Use of Indices**

The database engine utilizes the three index structures in order to answer queries and process relationships between Holons. The relation index is used to identify all data connected to e.g. a particular patient in a single step. Holon type identity index structures are used to find which Holons of a specific type that are present in a subset of data.

**Searching through Indirect Relationships**

By utilizing the power of the ontology-based information model, the resulting graph database can be searched in different ways. The illustration below shows the difference between searching with and without reflection.

**Use Cases**

A search for a value could potentially not only retrieve all the information units containing that value, but could also be configured to retrieve all directly or indirectly related information. Examples of questions:

- What other adverse events have been reported for patients with elevated liver values who received drug A?
- Which female patients that were given a dose of drug A have had high blood pressure measurements during episodes of severe headache?