

Sparksee

A graph database by Sparsity Technologies

→ New solutions for new needs

The emergence of huge networks such as the Internet geographical systems, transportation or social network databases, has brought the need to manage information with inherent graph-like nature. In these scenarios, users are not only keen on retrieving plain tabular data from entities, but also relationships with other entities using explicit or implicit values and links to obtain more elaborated information. In addition, users are typically not interested in obtaining a list of results, but a set of entities that are satisfying a given constraint. Under these circumstances, the natural way to represent results is by means of graphs. As a consequence, classical database management systems (DBMS), typically based on the relational model, may fall short to answer queries with these objectives.

→ Scenarios. Where relationships are relevant

Social networks

Twitter, Facebook, LinkedIn, Delicious, Flickr, MySpace.

Information networks

Bibliographical databases, Wikipedia, IMDB.

Security networks & Fraud detection

Economic transactions, National security analysis.

Recommendation

Ecommerce, retailer coupon analysis.

Media analysis

Audiovisual content recommendation, concept maps

Physical networks

Logistics, transport, electrical, telecom networks.

Biological networks

Protein interaction, patterns for diseases treatments discovery

→ **Sparksee is a high-performance Graph Database Management System for network analysis.** One of its main characteristics is its query performance for the retrieval and exploration of large graphs at very low storage cost. Sparksee is capable of storing and processing billions of nodes, edges and attributes, allowing the analysis and querying of large scale networks.

→ Sparksee benefits

- ✓ High-performance for very large networks.
- ✓ Persistent storage for large volumes of data.
- ✓ Fast answering time for complex queries.
- ✓ Relationships between entities implicit in the model.
- ✓ Flexible managing unknown or dynamic schemas.
- ✓ Graph algorithms to improve the analysis of the connected information in network-like structures.
- ✓ Rich and versatile API.
- ✓ Diverse graph visualization formats.
- ✓ Lots of different already explored scenarios where graphs are the key solution.
- ✓ Specialized support with fully experienced engineers.
- ✓ Successful stories to share at national and international level.