

Neo4j

<https://neo4j.com/>

Neo4j is a graph-based NoSQL system. Unlike traditional Relational DBMS like MySQL, Neo4j stores nodes and edges of graphs. For example, a Neo4j database can store two person nodes, one movie nodes, and two edges labeled 'acted_in' indicating relationship between these two person nodes and the movie node. Each node can contain multiple properties, just like a row can contain multiple columns in MySQL. Neo4j just fit the demand for storing datasets like social networks and knowledge graphs, and can be easily used for recognizing patterns, generating recommendations, question-answering when combined with machine learning algorithms. These tasks are hard and not intuitive if using relational database in which all related tables must be joined together.

Neo4j combines native graph storage to deliver super fast queries, scalable architecture to store huge amount of data, and also ACID compliance to guarantee the integrity of relationship-based queries. Neo4j is popular and used by many organizations all cross the world including Ebay, IBM, Microsoft, NASA. Neo4j provides a powerful graph query language (Cypher), handful libraries for faster development, and supports programming with Java, Python, Node.js, etc.