Graph Database Introduction

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What is graph?

A graph is composed of two elements: a node and a relationship.

Each node represents an entity (a person, place, thing, category or other piece of data), and each relationship represents how two nodes are associated. This general-purpose structure allows you to model all kinds of scenarios – from a system of roads, to a network of devices, to a population’s medical history or anything else defined by relationships.

What is graph database?

A graph database is an online database management system with Create, Read, Update and Delete (CRUD) operations working on a graph data model.

Unlike other databases, relationships take first priority in graph databases. This means your application doesn’t have to infer data connections using things like foreign keys.

What Are the Advantages?

Tech giants like Google, Facebook, LinkedIn and PayPal all tapped into the power of graph databases to create booming businesses.

Performance: intensive data relationship handling

Flexibility: easy to adapt environment when changes happen

Agility: adatible to test-driven environment

What Are Common Use Cases?

- Real-time recommendation engines
- Master data management (MDM)
- Identity and access management (IAM)

References

- https://neo4j.com/
- https://neo4j.com/why-graph-databases/