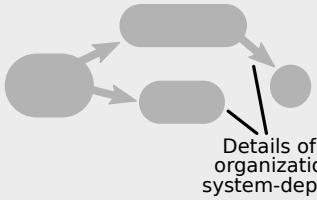
Object-Oriented DBMS

Vertices and edges are stored in Java, C#, ... language objects

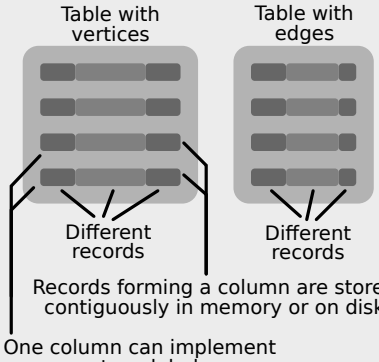


Examples: GraphObjectivity ThingSpan, Velocity

Model used: objects

Column RDBMS

Vertices and edges are stored in rows of two column-oriented tables

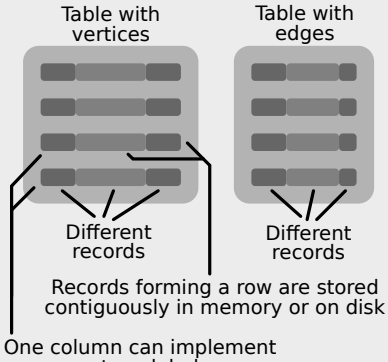


Example: SAP HANA

Model used: tables (implementing relations)

Row RDBMS

Vertices and edges are stored in rows of two row-oriented tables



Example: Oracle Spatial and Graph

Model used: tables (implementing relations)

Data Hub

Combines multiple models and/or storage schemes

Examples: Cayley, InfoGrid, MarkLogic, OpenLink Virtuoso, Stardog

Model used: several different ones

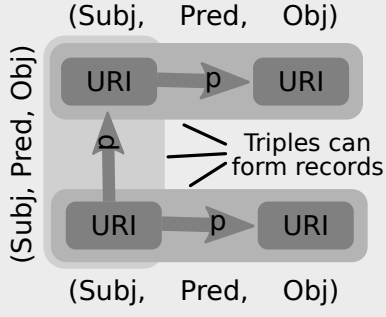
RDBMS

OODBMS

NoSQL stores

RDF Store (Triple Store)

Subject URIs are linked to object URIs via predicates

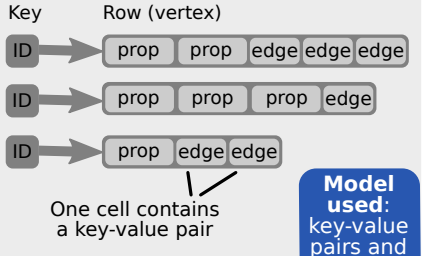


Examples: AllegroGraph, Cray Graph Engine

Model used: triples

Wide-Column Store

A vertex is stored in a row and it is indexed by a unique ID; its properties, labels, and adjacent edges are stored in row cells

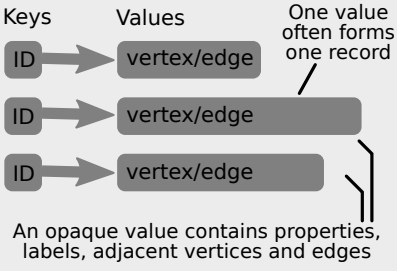


Model used: key-value pairs and tables

Examples: Titan, JanusGraph, DSE Graph,

Key-Value Store

Vertices and edges are encoded in values and indexed by keys (IDs)

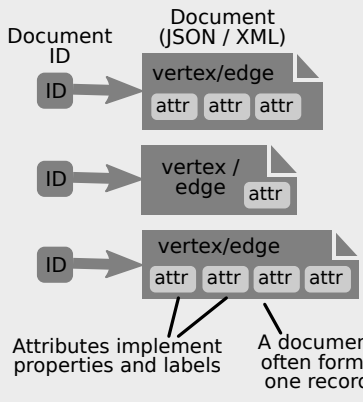


Examples: Dgraph, HyperGraphDB, MS Graph Engine

Model used: pairs of keys and values

Document Store

Vertices and edges are encoded in documents (e.g., JSON) and linked via pointers or document IDs

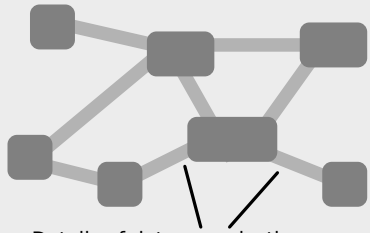


Examples: OrientDB, ArangoDB, Azure Cosmos DB, FaunaDB

Model used: documents

Native Graph Store

Custom database systems, optimized for graph storage and traversal queries.

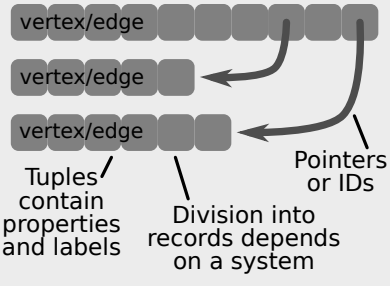


Examples: Sparksee/DEX, TigerGraph, GraphBase, Memgraph, Neo4j, PGX

Model used: Labeled Property Graph

Tuple Store

Vertices and edges are stored in tuples, linked via pointers or IDs of other tuples



Examples: WhiteDB, Graphd

Model used: tuples