Abstract

Relational Database is a database that has dominated storing dan retreiving data media for many decades since it has been developed by Edgar Codd in 1970[15]. Relational Database is a tabular data storage that relies on a rigid schema. Therefore, relational database is getting difficult to work when the number of data dan the number of relationship is relatively getting larger or requires many Join operations.

But there are many applications that require relational database as storing dan retrieving data media. Social Network is one of applications that requires relational database but it's very difficult to model social network when the relationships have been getting complex in relational database.

One of solutions that is proposed is transforming database from Relational Database to Graph Database. Graph Database is one of methods of NoSQL (Not Only SQL) that is a data storage management system that is oriented on a graph which is its data model is modelled in graph form.

The result of testing shows that the response time of Graph Database is much smaller than the response time of Relational Database. This shows that the social network model is very appropriate to use graph database as its data storage media.

Keywords: *Relational Database*, *Social Network*, *NoSQL*, *Graph Database.*