

ABSTRACT

A Spatial Database is a database that is optimized to store and query data related to objects in space, including points, lines and polygons. While typical databases can understand various numeric and character types of data, additional functionality needs to be added for databases to process spatial data types. These are typically called geometry or feature.

This final project focuses on build a geographic information system that use spatial database to query geometry or feature of spatial data from PLN and represent in on online web based map. This system cans also generating position of electrical relay and electrical pole automatically on one region that some new PLN customers want install new electricity network.

This system compares the scalability performance (response time, the use of server resources, memory, processing simple to complex queries, a new influx of data in bulk) in the two-Spatial Database namely PostgreSQL and MySQL spatial on a case study of PT PLN UPJ Campurdarat Tulungagung. In this case study, the use of the PostgreSQL database relational better used for storage of spatial data and compared with the MySQL Spatial.

Keywords : Spatial Database, performance, PostgreSQL