ABSTRACT

The importance of tracking system in a company is increasing recently. Vehicle tracking is expected to help increasing the efficiency of company vehicles usage. Main problems that exist within the company which doesn’t have any vehicle tracking system is the lack of vehicle position information in a certain time, that also implies in the difficulty of misrouting detection. In the financial side, the implementation of such a system with conventional approach will lead to a huge investment requirement for the company.

Implementation of this tracking system is done by installing a GPS tracking inside a vehicle and prepare for a data buffer server. The GPS will send a position of a vehicle in certain interval via GSM network, then this data will be read by ERP system. The positional data will be processed to determine a misrouting distance before saved to the database. The ERP 2011 web application database is designed using multischema design to enable this application as a software as a service. Implementation of multischema database design also provides better security and data privacy for each company using this system.

Implementation of a GPS tracking system in each vehicle with central server is expected to be a solution for tracking problem in
a company. In the other hand, the Software as a Service model will suppress the investment requirement to implement such a system.

*Keyword: ERP, GPS, SOA, tracking, route detection*