

## ABSTRACT

Sistem Informasi Administrasi Kependudukan (SIAK) is one type of software that can be used to help process data management and recording of personal data on the population of one government agency that is engaged in the administration of residence services.

This final project created a system where the filling process of the SIAK application done not only through the website but also via SMS by using the technology of SMS Gateway. SMS Gateway System is built with three main areas, Gammu as a special tool's server for SMS Gateway, PHP as a programming language, and MySQL as a database server. Gammu connect a computer to a cell phone which acts as a server in the processes of sending and receiving SMS. MySQL is used to store data which comes from Gammu and also the information from the web application. PHP itself is used to create web applications that process the data.

Tests conducted on this system are divided into two kinds, namely testing the functionality of the system and test the system performance. Functional test is done by testing the function or any process that occurs in the application either from the client side and admin, and the result is that every function in this application can run properly. In performance testing measured the difference between a sms delivery time to time received a reply. The result is the average time required was 50-50.6 seconds if you use the same operator between the client and admin and 64.99 seconds if you use different operators. While for the web server load testing to determine the working capacity of the web by accessing the results on the web by 400 virtual users started to have an error in the access.

**Keywords:** SIAK, SMS Gateway, Gammu, XAMPP