

## ABSTRACT

Streaming multimedia is a technology that is popular among internet users application. Audio streaming is one of the multimedia applications that being developed lately. Audio streaming can be called the IP radio, which listeners can listen to the radio by using an internet connection. Radio IP requires at least one administrator to manage the type of the music being played. The difficult of administrator is they always have to standby at server table to set the radio type of the music being played.

Wireless Application Protocol or WAP is the standard protocol for wireless application (usually used on the phone). WAP is a protocol or messaging service engineering that allows a mobile terminal which has a facility to view / read the contents of a site at internet in a special text format.

In this final project application, i designed radio remote server IP-based mobile phone via WAP. This application works as a remote radio IP server that allows a server administrator to remote radio server. With this application administrator can manage the content in the IP radio anywhere, using mobile phone, so that contents of radio can be updated and enjoyed by the client every time. Results obtained from the application processor load's burden does not affect the server when idle and the server is accessed by a client, the response time when the admin set the server via a mobile phone that is not too long, just between 2 until 9 second, and the more client accessing the server, the greater the value of delay RTT, OWD, and jitter. So according the measuring this server performance is worthy.

**Keywords:** Audio Streaming, IP Radio, mobile phone, WAP