

ANALISIS PERFORMA JARINGAN BERBASIS SHOUTCAST AUDIO STREAMING SERVER UNTUK KEBUTUHAN LIVE STREAMING DI RADIO SSFM SEMARANG

AMRIH YOGI SOEKIMAN

(Pembimbing : DR Ruri Suko Basuki, M.Kom)

Teknik Informatika - S1, FIK, Universitas Dian Nuswantoro

www.dinus.ac.id

Email : 111201307473@mhs.dinus.ac.id

ABSTRAK

Streaming server menawarkan kemudahan serta keamanan lebih dibandingkan konvensional. Konektivitas jaringan berkaitan erat menentukan kualitas streaming server itu sendiri. Penelitian ini menggunakan streaming server sebagai media live streaming guna membantu proses penyebaran siaran radio di Radio SSFM Semarang. Proses pengujian pada jaringan streaming server tersebut diuji satu per satu. Proses penghitungan menggunakan beberapa tools untuk mengukur jumlah bandwidth, latency, packet loss, jitter dan datagram. Data-data tersebut merupakan penentu performa jaringan sejak lama. Hasil yang didapat adalah jaringan yang dibangun berjalan sebagaimana yang diharapkan. Hasil performa jaringan memiliki bandwidth, latency dan jitter yang beragam naik dan turun. Hasil dari pengujian yang dilakukan pada streaming server didapatkan hasil yang baik jika di bandingkan dengan standarisasi internasional ITU-T G.114, maka hasil quality of service yang dihasilkan dapat dikategorikan sangat baik dan layak untuk digunakan. Waktu sampai antara broadcaster ke client tergolong kecil yaitu dibawah 7s, walau permasalahan seperti spesifikasi perangkat client dan koneksi yang terhubung ke perangkat client perlu diperhatikan lagi. Dengan streaming server ini dapat mempermudah proses perluasan jangkauan siaran pada Radio SSFM Semarang.

Kata Kunci : Shoutcast Streaming, Performa Jaringan, Audio Streaming Server

**ANALYSIS OF NETWORK PERFORMANCE BASED ON SHOUTCAST
AUDIO STREAMING SERVER FOR LIVE STREAMING REQUIREMENT
IN RADIO SSFM SEMARANG**

AMRIH YOGI SOEKIMAN

(Lecturer : DR Ruri Suko Basuki, M.Kom)

*Bachelor of Informatics Engineering - S1, Faculty of Computer
Science, DINUS University*

www.dinus.ac.id

Email : 111201307473@mhs.dinus.ac.id

ABSTRACT

Streaming servers offer convenience as well as security more than conventional. Network connectivity are closely related to determine the quality of the streaming server itself. This research uses a streaming media server as a live stream to help the process of dissemination of radio broadcast on Radio SSFM Semarang. The process of testing on the network streaming server is tested on by on. The process of counting using several tools to measure the amount of bandwidth, latency, packetloss, jitter and datagram. This data is a determinant of network performance for a long time. The results obtained are the build network runs as expected. The results of the performance of the network has a bandwidth, latency, and jitter are varied up and down. The results of testing performed on the streaming server obtained a good results it compared with international standards ITU-T G 114, then the results of the quality of service that is produced can be categorized very well and deserve to be used. Time until between the broadcaster to the client belongs to the smaller under 7s, though problems like the specs of the device client and the connection which is connection to the client device to note again. With streaming servers this can ease the process of expanding the reach of broadcast on Radio SSFM Semarang.

Keyword : Shoutcast Streaming, Network Performance, Audio Streaming Server