

ABSTRACT

Softswitch is the implementation of a connectivity function (or ‘virtual switch’) in distributed future generation central. Its main function is used as a switching and call control, like the circuit central main function, with the ability to serve the phone subscriber, the internet, and the multimedia subscriber. Softswitch controlling call setup and end call from and to the subscriber been served as well as to arrange the connectivity between the subscriber and the internet simultaneously.

Softswitch network using packet based technology with the ability of bandwidth management to handle the traffic information efficiently. Softswitch networking have a large scalability in the case of the capacity that can be accommodated, the given services, and the Quality of Service (QoS). With this advantage, softswitch, which applying the use of the packet technology which is the concept of NGN technology, continued with the convergence concept with the migration process from the PSTN network which applying TDM technology to the packet based softswitch technology. This process has also been applied by the biggest telecommunication company in Indonesia, which is PT.TELKOM.

In this Final Paper got analysis of softswitch network performance at PT.TELKOM Indonesia which have been implemented in some area in Indonesia, includes the traffic analysis, system capacity, bandwidth utility, and call handling process which is done by softswitch network in Cikupa Trunk Gateway (TG JK5T) and Bandung Trunk Gateway (TG BD2T). The result from this analysis compared to the performance of softswitch network that has been implemented by PT.TELKOM, which is expected can give a report to the “establishment” of softswitch network, and also to get the result to problems appeared based on the data taken from the field.