Abstract

Internet is widely used across the world to serve many purposes by millions of people every minute. This has given rise to many fold increase in internet based service providers. The internet traffic shared between these service providers gets jammed due to heavy load on the network. Naldi (2002) discussed model based internet traffic share problem in a different way, based on the assumption of call-by-call basis. Further, this idea of call-by-call improved and transformed to two-call-basis by Shukla and Gadewar (2010) and enhanced results arrived. In this paper market based internet traffic share has been calculated in terms of quality of services, initial preferences and other network parameters. Traffic share expressions for different kind of operators have been derived and simulation study is performed. It is found that traffic share is highly correlated with the location of market and network blocking probability.

References


Index Terms

Computer Science

Networks

Keywords

Traffic Share Analysis (TSA), Two Call Basis (TCB), Transition Probability Matrix (TPM), Markov Chain Model (MCM)