Abstract

Divide and conquer (D&C) based IPv6 ALPM (Address Longest Prefix Matching) using a new reduced segment table (RST) is a challenging issue for an innovative and creative researchers due to increasing routing table size, the increasing link speed, and the increasing network traffic with reduced packet size. In this paper we proposed a new innovative translator called BD-TTCS (Bi-Directional Transmission and Transfer Control System) which clearly illustrates reduction tree based on number of entries in a routing table using section division Method. We simulated and tested the proposed scheme using D&C based on IPv6 ALPM using a novel RST in BD-TTCS Translator. We used NS2 and Matlab 7.11.0 (R2010b) to simulate results and in order to plot bar graph and Line Graph. To Judge the performance of our scheme on different performance parameters some results with different graphs are shown in the figures. From the perspective of analysis of computing time the overall time complexity of the proposed method is \( o(\log n) \) where \( N \) is the number of routing entries in a routing table. Using NS2 based simulation results we have analyze the various performance parameters.
- Rudra Pratap, "Getting Started with MATLAB &"; Oxford University Press.
A New Scheme for IPv6 BD-TTCS Translator: A Section Division Approach

- Ns2 tutorial running simulations by Matthias Transier.
- Mahmood Hasanlou, "Introduction to mobility and network simulator 2".

**Index Terms**

Computer Science Networks

**Keywords**

Bd-ttcs d&c ipv4 ipv6 lpm ns2(network Simulator-2) rst Etc.