Abstract

Token ring and token bus networks are two of the most commonly used type of local-area network (LAN). Token ring is designed in such a way that it can provide high throughput under heavy loads. Token bus is implemented using the token ring protocol over a virtual ring on a coaxial cable. The names, token ring and token bus, are applied to LANs which support a multiple access system using a token passing scheme. It is possible to define the maximum access delay experienced by a packet and thus to define the end-to-end delay across the network. In this paper after simulating the token ring and token bus technologies we have focused on the performance issues like throughput, mean delay, normalized throughput and response time of both the techniques. Lastly using some graphs and the data deduced from our simulation we have compared and concluded that token ring performs better than token bus for multi hop network design.

Index Terms

Computer Science

Circuits and Systems

Keywords

Local Area Network; Mean Delay; Normalized Throughput; Response Time; Throughput; Token Bus; Token Ring