Abstract

These paper is based on simulation of the Perfect Difference Network (PDN) and N-Complete Network (Kn) using NS2 (Network simulator) for 7 and 13 nodes. This paper is not only doing simulation part and also the analysis sections to find out which topology is better with respect to cost and performance. This paper is comparing the performance of PDN architecture and mesh architecture in terms of various parameters thus explaining the benefits of replacing mesh architecture by PDN architecture. Throughput, packet loss are the primary parameters for comparison while change in traffic rates, link failure etc. are the secondary parameters. In some conditions, mesh provides better performance than PDN but it is compensated by reduced cost (as the number of link is reduced) by PDN.

References

8. Rakesh Kumar Katare, N.S. Chaudhari, Shazad Ahmed Mughal “Study of Link Utilization of Perfect Difference Network and Hypercube”

**Index Terms**

Computer Science  
Networks

**Keywords**

Perfect Difference Network; N Complete Network; PDS; ns-2