Abstract

With the growing need to distribute applications across multiple networks and the availability of high capacity, high-performance intermediate switching nodes and networks, an efficient routing mechanism has become the core requirement. This paper compares the performance of intra-domain routing protocols such as Enhanced Interior Gateway Protocol (EIGRP) and Interior Gateway Protocol (IGRP) of IEEE 802.3 LAN by evaluating various parameters including Network convergence time, End to End Delay, Delay Variation, Throughput, Utilization, Queuing Delay and IP Processing Delay. In addition to these metrics, we also compared the performance of video- and voice-data on the entire network under various constraints managed by routing protocols. Our simulation has been performed using the well-known simulator OPNET.

References

- Mohammad Nazrul Islam, 2010. Simulation Based EIGRP over OSPF Performance
Performance Analysis of IEEE 802.3 using IGRP and EIGRP Routing Protocols

- Dong (Don) Xu, Ospf, 2011. EIGRP and RIP performance analysis based on Opnet, Communication Networks, Springer.
- Zhou Haijun, Pan Jin, Shen Pubing 2003. Cost adaptive OSPF; Proceedings of Fifth International Conference on Computational Intelligence and Multimedia Applications ICCCIMA 2003, 55-60.
- OPNET Documents, http://www.opnet.com

Index Terms

Computer Science
Keywords
Igrp  Eigrp  Opnet Simulator