The Simulation of System Performance for the Link Failure on MPLS Networks

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ABSTRACT

The increasing demand for broadband services in the Internet will create a network bandwidth shortage and severely limit the capability to broadcast rich media in the Internet. MPLS (Multiprotocol Label Switching) is a standards-based technology that can improve network performance and quality of service (QoS) for select traffic. Since the network behavior is dynamic, the reliability and the performance of MPLS become important issues. An automatic link recovery of MPLS environment is created by NS2 in this paper. The relation between rate of link recovery and performance of MPLS has been studied. An idea case without link broken was compared with different link failure scenarios with different recovery rates. Delay, throughput, loss and jitter are the metrics for MPLS performance under different link recovery rates.

Keywords : MPLS ; 鏈路斷線 ; 斷線修復 ; 斷線效能 ; NS-2

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