Availability Strategy of Medical Information for Telemedicine Services

Authors : Rozo D. Juan Felipe, Ramírez L. Leonardo Juan, Puerta A. Gabriel Alberto

Abstract : The telemedicine services require correct computing resource management to guarantee productivity and efficiency for medical and non-medical staff. The aim of this study was to examine web management strategies to ensure the availability of resources and services in telemedicine so as to provide medical information management with an accessible strategy. In addition, to evaluate the quality-of-service parameters, the followings were measured: delays, throughput, jitter, latency, available bandwidth, percent of access and denial of services based of web management performance map with profiles permissions and database management. Through 24 different test scenarios, the results show 100% in availability of medical information, in relation to access of medical staff to web services, and quality of service (QoS) of 99% because of network delay and performance of computer network. The findings of this study suggest that the proposed strategy of web management is an ideal solution to guarantee the availability, reliability, and accessibility of medical information. Finally, this strategy offers seven user profile used at telemedicine center of Bogota-Colombia keeping QoS parameters suitable to telemedicine services.

Keywords : availability, medical information, QoS, strategy, telemedicine
Conference Title : ICCDM 2018 : International Conference on Communication Design and Management
Conference Location : Los Angeles, United States
Conference Dates : October 30-31, 2018