

Abstract Details

Title: Performance Evaluation of G.729AVIOP Coder using Wired and Wireless Communication Network

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Abstract: Voice over Internet Protocol (VoIP) has been an interesting topic of research in the last decade. The engrossing increase in the use of VoIP services is resulting in the enormous growth of broadband network. The main objective of this paper is to evaluate the performance of G.729A VIOPcoder for different networks. Wired, Wireless Local Area Network (WLAN), Worldwide Interoperability for Microwave Access (WiMAX) and Universal Mobile Telecommunication System (UMTS) networks were implemented in OPNET Modeler The quality is compared using different QOS parameters like end-to-end delay, MOS, throughput and jitter. The VoIP codecs used in the measurements of QOS are: G.729A. Simulations showed In WiMAX, G.729A gives the best quality of VoIP while in UMTS, GSM- FR gives overall best results with respect to all the parameters. Communications the results analyzed and the performance evaluated will give network operators an opportunity to select the codec for better services of VoIP for customer satisfaction.

Keywords: VoIP; WLAN; WIMAX; UMTS; Codec; QoS.