Abstract

The emergence of VoIP in the growing Internet services today has brought about new way in which services are rendered to the public. In view of providing better alternative to Public Switch Telephone Network (PSTN) with high quality and efficient internet telephony (VoIP), there is a need of having an improved QoS in Voice transmitted over the Internet. In this work, the influence of different impairment factors on Voice over Internet Protocol (VoIP) as a contributory factor were analyzed, characterized, and evaluated. The results obtained from the research work compared with the theoretical values have some common correlations. This indicated that the impairment factors have significant contributory effect on voice transmitted over the internet.
Modelling the Contributory Effect of Impairment Factors on Voice Transmitted over the Internet

References

- Xianhui Che et al. "VoIP Performance over different Interior Gateway protocols"; International Journal of Communication Networks and Information Security (IJCNIS) Vol. 1, No. 1, April 2009; Pg. 34.
- Shu Tao et al, "Improving VoIP Quality Through Path Switching"; University of Pennsylvania KualaXu, University of Minnesota Antonio Estepa, University of Sevilla... works. bepress.com/lixin_gao/75/; 2005.
- Alan Clark "Voice Quality Measurement: Understanding VoIP"; CEO and President, 2005
- Alan Clark; "Telchemy IP Network Impairment Simulator"; version 2.1, 2003
- KarieGonia – "Latency and Quality of Service for Voice over IP"; SANS Institute, version 2. 4bOption 1,2004.
- Xipeng Xiao et al., Internet QoS: A Big Picture; IEEE Network, March/April, 1999. Pg 8 – 14, QoS (Quality of Service); www.linktionary.com/q/qos.html
- Jeffrey Rodman, VoIP to 20 KHZ: Codec Choices for High Definition Voice Telephony; POLYCOM White Paper, July 2008.
- John S. N. et al., "Wide Area Network Efficiency Through Optimization of Key


- "Voice over IP; (VoIP); SmartBits Performance Analysis System; Spirent Communications, 2001.

Index Terms
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Keywords
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Voice-over-IP