Abstract

Implementations of wireless network wave propagation models are necessary to determine propagation characteristic through a medium. Propagation study provides an estimation of signal characteristics. This paper evaluates about propagation models, their path loss behavior, propagation mechanisms, and propagation prediction techniques. A propagation model is a set
of mathematical expressions, diagrams, and algorithms used to represent the radio characteristics of a given environment. The accuracy of any particular propagation model in any given condition will depend on the suitability among the constraints required by the model and depend on terrain. This paper proposes new semi deterministic model derived by walfisch and Ikagami, this model simulation results represents the accuracy in terms of through put, end to end delay, average jitter and total packet received with respect to cost 231 Hata model and cost 231 (W.I) models and also shows some limitations, proposed model is unable to calculate multiple reflection loss caused by multi screen.

Reference

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**Index Terms**

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**Key words**

- Propagation mechanism
- Propagation prediction
- Techniques
- Propagation models