Recent trends in channel assignment algorithms for multi-radio multi-channel in Wireless Mesh Network

ABSTRACT

Wireless Mesh Networks (WMN) are an attractive technology and has been widely accepted by many organizations due to features such as accessing and routing. The issues regarding capabilities of multi-radio multi-channel (MRMC) has been extensively studied to design an efficient algorithm for WMN. Channel assignment and various techniques have been designed and developed to improve the network performance of MRMC. This paper offers conceptual understanding through a systematic review by classifying channel assignment constraints and its proposed solution. The results from our study provide clear understanding of approaches reported by previous studies in solving channel assignment problem. The analysis offered variety of areas that can be explored in leveraging channel assignment techniques towards improving the network performances.

Keyword: Channel assignment; Multi-radio multi-channel; Topology design; Wireless mesh network