

To utilize the available frequency channel space in wireless mesh networks (WMNs), recent work has significantly been focusing on the channel assignment in multi-interface and multi-channel wireless mesh network. This paper presents our design of a distributed channel assignment algorithm that assigns channels based on capacity of the channels. It is shown that the performance of the network is significantly improved when interference and capacity are considered to choose a channel. Simulation results show that our channel assignment algorithm performs better than a similar channel assignment algorithm which is distributed and based only on interference.