Abstract

The emergence of new-generation networking technologies and the wide-spread use of computers and wireless devices are providing opportunities for a new generation of powerful network systems. Recently, many researchers proposed several channel assignment (CA) algorithms in multi-radio multi-channel assignment (MR-MCA) wireless mesh networks (WMNs) to utilize available channels set in the network topology architecture. One of the key challenges faces MR-MCA is how to reduce the interferences to ensure the maximum throughput by improving the aggregate network capacity. There are several studies that have classified these CA algorithms into several approaches. The aim of this paper is to discuss the current channel assignment approaches in MR-MCA in wireless mesh networks and highlighting the state of the art for MR-MCA, which can help researchers and developers in the field of WMNs.
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Index Terms

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Keywords

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