

# Using Partially Overlapping Channels in Home 802.11g WLANs

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## Abstract

In this paper, we revisit the channel assignment problem in 802.11 Wireless Local Area Networks (WLANs). We focus on the Orthogonal Frequency Division Multiplexing IEEE802.11g networks and report results of experimental work conducted in a dense WLAN environment. Unlike recently published work that recommends avoiding partially overlapping channels (POCs) in IEEE802.11g-based WLANs, our experimental results show that POCs can be effectively used in such networks, depending mainly on channel load and the received power from interfering nodes.