

Heterogeneous uncoordinated deployment of WLANs: an evolving problem for current and future Wi-Fi access

Murad Abusubaih

murads@ppu.edu

Abstract

This article addresses the problem of uncoordinated heterogeneous deployment of 802.11 wireless local area networks (WLANs). It is expected that such deployments by different WLAN owners and WiFi providers will become a challenging problem that limits the network performance and quality of service of wireless users. We present results of a real case study that show a need for coordination among WLAN devices in order to avoid current and future problems. We provide potential solution directions. A special focus is given to channel assignment and coordinated channel access problems. Our results show that a new paradigm for designing WLAN devices seems to be crucial.