Abstract

Wireless Mesh Networks (WMNs) have emerged as a key technology for next generation wireless networking. The performance of these networks depends on routing protocols. IEEE 802.11s is one of the emerged standards designed to build WMNs for the classical standard 802.11. It defines the HWMP (Hybrid Wireless Mesh Protocol) as its default routing protocol which combines the Radio Metric Ad hoc on-demand distance vector (RM-AODV) with a proactive tree building mode. RM-AODV relies on the well known AODV protocol which provides paths by broadcasting path requests. However broadcast to find routing paths consumes much bandwidth and increases the traffic overhead. In this situation broadcast optimization is an ever-present issue. In this paper, the Geographical Hybrid Wireless Mesh Protocol (GHWMP) is presented.
  - IEEE, &quot;802. 11 standard: Wireless LAN medium access control (MAC) and physical layer (PHY) specifications,&quot; 2007, standard.
- IEEE, “P802.11s draft d3.02, draft amendment to standard IEEE 802.11: ESS mesh networking”, 2008, standard.

Index Terms

Computer Science

Wireless

Keywords

Wireless Mesh Networks  IEEE802.11s  routing protocol  HWMP  RM-AODV  GHWMP