ABSTRACT

Several recent studies indicate that many implementations of authentication and access control in public WLANs are compromisable. This is because IEEE 802.11 standard leaves the choice of EAP method to use to the discretion of WLAN system implementers due to the fact that IEEE 802.11 standard cannot and does not define the upper layer authentication. Therefore, this paper presents IEEE 802.11 implementation specific issues that may contribute to poor security performance of WLAN authentication and access control implementation. It also analyses various EAP methods and presents an algorithm for selection of an Extensible authentication protocol (EAP) method for a Public WLAN.