

ABSTRACT OF THE DISCLOSURE

A software based wireless infrastructure system is provided. The system has a driver that communicates with the network stack and a network interface card (NIC), a station server in communication with the station driver and an 802.1X supplicant or an 802.1X authenticator. Each NIC provides station and/or access point functionality support. The driver drops packets that have been received if the packet has not been authenticated and associated. Packets that have been fragmented or encrypted are unfragmented and decrypted. An association manager is used in conjunction with a configuration table manager to associate stations and access points via management packets. A manager receives 802.1X data packets from the packet processor and sends them up to a station server that communicates with user mode applications and an 802.1X supplicant or an 802.1X authenticator that are used to authenticate and deauthenticate stations and access points. APIs are provided to enable communication between the components.

FIGURE 3