Abstract

The availability and adoption of a wide range of mobile computing devices (e.g., laptops, Personal Digital Assistants (PDAs), wearable computers) of varying sizes and processing capabilities, along with the emergence of Wireless Local Area Networks (WLANs) such as IEEE 802.11 and Personal Area Networks (PANs) such as Bluetooth and HomeRF, are catalysts enabling the ubiquitous access of information anywhere, anytime. These networks are frequently being used as extensor to the Internet and end-users are exploiting them to access wireless Internet services from different types of handheld devices. In this paper, we focus on the Bluetooth PAN technology and we explore the different approaches available to Bluetooth devices that provide these devices seamless IP connectivity to the Internet. In addition, we also investigate and report experimental results on voice delivery to IPv6-enabled Bluetooth handheld devices such as pocket PCs connected to the Internet.