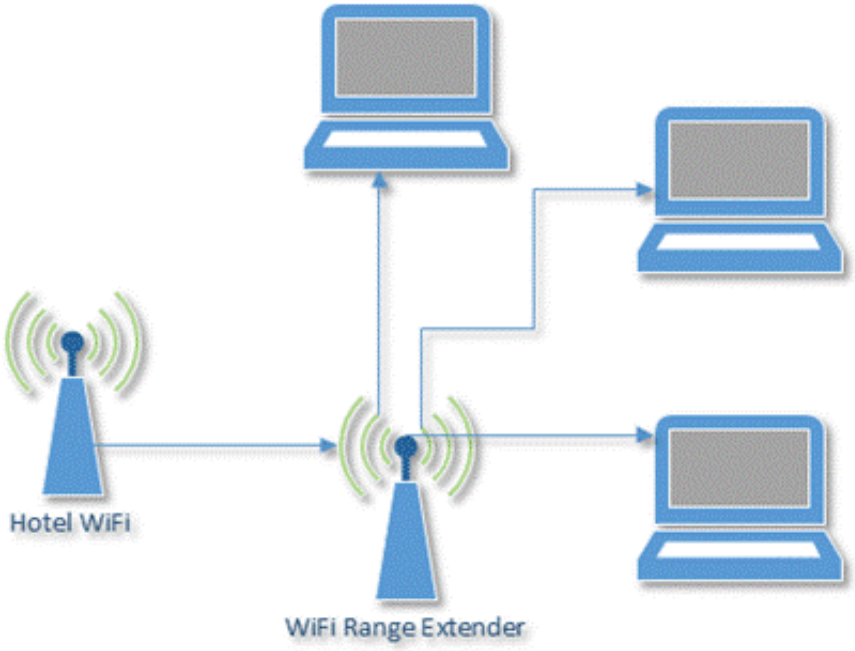
Wi-Fi

Introduction:

Wi-Fi stands for Wireless Fidelity. Wi-Fi is based on the IEEE 802.11 family of standards and is primarily a local area networking (LAN) technology designed to provide in-building broadband coverage.

One significant advantage of Wi-Fi over WiMAX and 3G is the wide availability of terminal devices. A vast majority of laptops shipped today have a built-in Wi-Fi interface. Wi-Fi interfaces are now also being built into a variety of devices, including personal data assistants (PDAs), cordless phones, cellular phones, cameras, and media players.

Wi-Fi provides wireless connectivity by emitting frequencies between 2.4GHz to 5GHz based on the amount of data on the network. Areas which are enabled with Wi-Fi connectivity are known as Hot Spots. One can use advanced softwares like Wirelessmon to detect and request connection to Hotspots. To start a Wireless connection, it is important that the wireless router is plugged into the internet connection and that all the required settings are properly installed.



Wi-Fi Hotspots:

A Wi-Fi hotspot is created by installing an access point to an internet connection. The access point transmits a wireless signal over a short distance. Wi-Fi typically covering around 300 feet. When a Wi-Fi enabled device, such as a Pocket PC, encounters a hotspot, the device can then connect to that network wirelessly.

Most hotspots are located in places that are readily accessible to the public, like airports, coffee shops, hotels, book stores, and campus environments. 802.11b is the most common specification for hotspots worldwide. The 802.11g standard is backwards compatible with .11b but .11a uses a different frequency range and requires separate hardware such as an a, a/g, or a/b/g adapter. The largest public Wi-Fi networks are provided by private internet service providers (ISPs) that charge a fee for users to connect to the internet.

Hotspots are increasingly developing around the world. In fact, T-mobile USA controls more than 4,100 hotspots located in public locations such as Starbucks, Borders, Kinko's, and the airline clubs of Delta, United, and US Airways. Even select McDonald's restaurants now feature Wi-Fi hotspot access.

Any notebook computer with integrated wireless, a wireless adapter attached to the motherboard by the manufacturer, or a wireless adapter such as a PCMCIA card can access a wireless network. Furthermore, all

Pocket PCs or Palm units with Compact Flash, SD I/O support, or built-in Wi-Fi, can access hotspots.

Some Hotspots require WEP key to connect that is the connection is considered to be private or secure. As for open connections, anyone with a WiFi card can gain access to that hotspot. So in order for a user to gain access to the internet under WEP, the user must input the WEP key code.