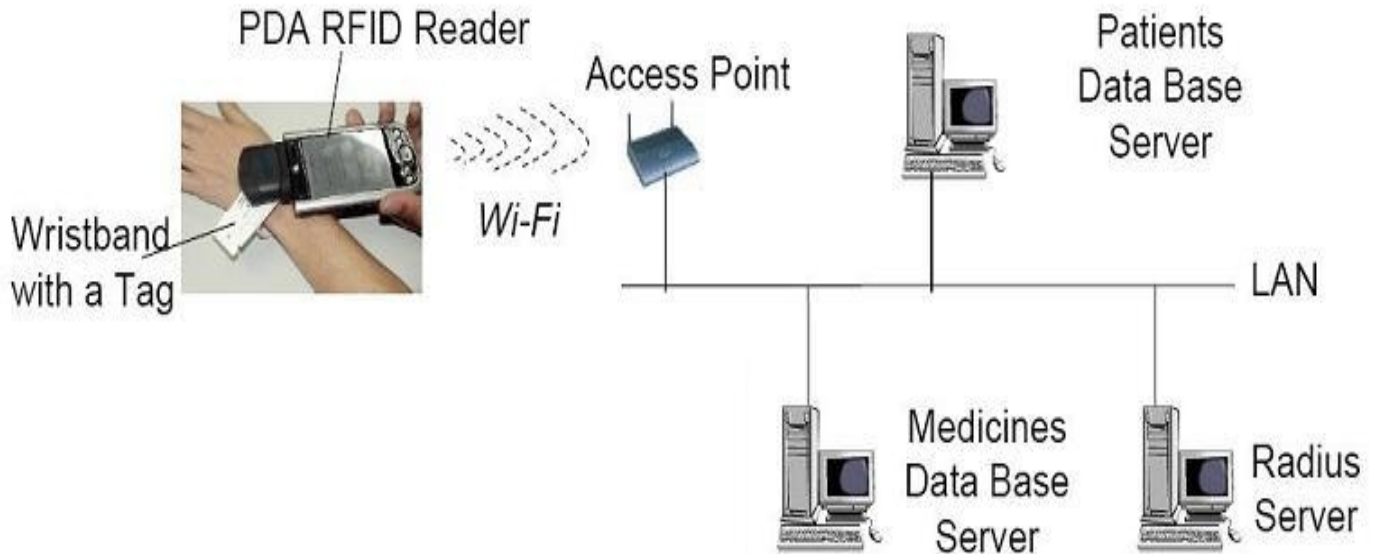




- + Add Values
- Reduce Overhead
- ÷ Re-Engineer the Business Process
- × Multiply Returns On Investment
- ? Ask us how



## ReAL Wi-Fi

Reltronics Technologies ReAL Wi-Fi system allows tracking of assets and inventory utilizing the Wi-Fi network. Wireless technology has become an important tool in how RFID data is transmitted and ReAL Wi-Fi fully supports the 802.11g wireless standard that has been ratified by the Institute of Electrical and Electronic Engineers (IEEE). Particularly, ReAL Wi-Fi supports the IEEE adopted IEEE Std. 802.11-1997, the first wireless LAN (WLAN) standard and IEEE 802.11, the Wi-Fi standard, which refers to a set of Wireless LAN / WLAN standards made by the working group 11 of the IEEE LAN/MAN Standards Committee (IEEE 802).

ReAL Wi-Fi allows tracking of Wi-Fi enabled devices such as a computer, cell phone or PDA and has the capability to automatically connect to the network when in proximity of an access point. ReAL Wi-Fi also caters to the region covered by one or several access points called a hotspot. This is especially useful when field engineers are in close proximity with a hotspot and need to synchronize their handheld or mobile RFID devices.

ReAL Wi-Fi also allows connectivity in peer-to-peer (wireless ad-hoc network) mode, which enables devices to connect directly with each other.

### ReAL Wi-Fi Technology:

A typical ReAL Wi-Fi setup contains one or more Access Points (APs) and one or more clients. The ReAL Wi-Fi broadcasts its SSID (Service Set Identifier, "Network name") via packets that are called beacons, which are usually broadcasted for every 100 ms. The beacons are transmitted at 1 Mbit/s, and are of relatively short duration and

therefore do not have a significant effect on performance. Since one Mbit/s is the lowest rate of Wi-Fi it assures that the client who receives the beacon can communicate at least one Mbit/s. Based on the settings (e.g. the SSID), the SmartClient offered by Reltronics Technologies and inherent within the ReAL Wi-Fi may decide whether to connect to an AP or not. If two APs of the same SSID are in range of the client, the SmartClient uses the signal strength to decide which of the two APs to make a connection to.

### Workflow:

The following is the workflow of the ReAL Wi-Fi. The tag transmits over the wireless LAN and intelligence in the LAN triangulates to work out the location within the hospital, to about 5m of distance. The ReAL Wi-Fi determines the location of the device based on data being collected from multiple access points. The ReAL Wi-Fi determines the various attributes including the coordinates, heading, and speed. A simple search facility on a wireless mobile RFID device enables users to easily find the asset position in real time. Historical information is stored within the ReAL Wi-Fi application so the asset utilization over a period of time can be understood. The system is integrated with existing applications such as asset management and security alarms. For tracking the assets and people, ReAL Wi-Fi coordinates with 802.11 Wi-Fi tags.





**Features:**

ReAL Wi-Fi wireless 802.11g system makes use of the 2.4 GHz frequency band, and has a communication range of 100 meters.

ReAL Wi-Fi meets the high demanding areas of WLAN are Logistics, data warehouse management system.

ReAL Wi-Fi wireless 802.11g system provides backward compatibility with 802.11b and promises faster speeds while running on the same frequency as 802.11b, which should promote acceptance.



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