

Wi - Fi

- Swarna Prabha Jena

Asst. Prof., Department of ECE

WHAT IS WI-FI ?

- Wi-Fi suggests Wireless-Fidelity compared with the long established audio recording term High Fidelity or Hi-Fi.
- Wi-Fi is simply a trademarked term meaning IEEE 802.11x.
- It's like a common language that all the devices use to communicate to each other. If you have a standard, people can make all sorts of devices that can work with each other.

WHEN WI-FI ORIGINATED ?

- The precursor to Wi-Fi was invented in 1991 by NCR corporation in Nieuwegein, the Netherlands.
- The first wireless products were brought on the market under the name WaveLAN with speeds of 1 Mbit/s to 2 Mbit/s.
- Vic Hayes has been named as father of “Wi-Fi”.

HOW WI-FI WORKS ?

- WiFi is used to transmit data, allow computers to the internet and allow computers to connect to wireless resources such as hard drives, printers and other external devices.
- One could connect to a wireless printer, camera, or hard-drive using a mobile phone or PDA. This would allow to save documents onto a wireless hard-drive like Time Machine which could be wirelessly accessed by a PDA or mobile phone and wirelessly printed which would remove the need for starting up a computer or laptop.

HOW WI-FI CONNECTS ?



TECHNOLOGIES

Wi-Fi has now become a very common technology and is available widely and cheaply on a range of devices.

Examples of this include:

- iPhone
- Other phones
- Cameras
- Printers
- Laptops
- Game Consoles
- ^{SPJ} iPod touch

SECURITY

- WiFi has the capabilities for high levels of security but often it requires people to set up complicated passwords, user-names and access keys.
- This is without using certificates to limit usage of network resources.
- Wi-Fi has three main security protocols, WEP
WPA WPA2. Each of these standards has differing levels of security.

ADVANTAGES OF WI-FI

- Wi-Fi can make access publicly available at Wi-Fi hotspots.
- Does not require regulatory approval for individual.
- Wi-Fi network can support roaming.
- Wi-Fi allows local area network to be deployed without client devices.