



UNDERSTANDING Wi-Fi

QUESTIONS AND ANSWERS FROM SBC INTERNET SERVICES TO HELP YOU BETTER UNDERSTAND THE Wi-Fi REVOLUTION.

What is Wi-Fi?

Wi-Fi, or Wireless Fidelity, is a popular term for a technology that allows you to connect to the Internet at fast speeds without using wires. Wi-Fi access can be set up in homes, offices, or public hot spots placed in locations such as airports, hotels and convention centers to provide a convenient way to connect to the Internet or a corporate network and e-mail from a personal computer or handheld device.

What are the benefits of Wi-Fi?

Combining the benefits of high speed Internet service with Wi-Fi's wireless access provides users more freedom and flexibility. The convenience of Wi-Fi enables mobility and increases personal and work productivity.

What equipment do I need to use Wi-Fi?

Wireless Internet connectivity requires a Wi-Fi-enabled laptop computer or some other mobile computing device such as a PDA and its accompanying software. Also needed is a Web browser such as Microsoft Internet Explorer, Netscape Navigator or SBC Yahoo! browser.

How does Wi-Fi work?

Wi-Fi runs on an unregulated and unlicensed radio spectrum band that is also used by household appliances such as microwaves and cordless home phones. Without the use of wires, the radio signal connects a user's laptop or handheld device to an access point. Traffic from the access point reaches the SBC network – and ultimately the Internet or a corporate intranet – via a T1 or DSL line or other high-speed transport service.

How fast is Wi-Fi?

Wi-Fi connectivity speeds depend on factors such as the quality of the signal, your distance from the hot spot and how many people are using it at a particular time. Between the access point and their Wi-Fi enabled devices, most users typically experience speeds between 2 and 5 megabits per second (Mbps). Two popular standards for connecting to a Wi-Fi hot spot are 802.11b and 802.11g. Devices using the "b" standard transmit information at a top speed of 11 Mbps and "g," the newest standard, promises speeds as fast as 54 Mbps. Both 802.11b and 802.11g standards are compliant with each other, enabling equipment running either standard to work together.

What is the range of access at a hot spot?

Wi-Fi equipment providers typically claim Wi-Fi service can work at a range of up to 300 feet from the hot spot, but with walls and other structures, the signal typically extends to around 150 feet.

When will SBC companies start deploying public hot spots?

SBC companies plan to have hot spots available commercially beginning this fall.

Where will SBC Wi-Fi service be available?

SBC companies plan to make Wi-Fi Internet service, called FreedomLinkSM, available in major SBC markets and customers will be provided with access to hot spots in other parts of the country through roaming agreements with other Wi-Fi service providers and aggregators. Ultimately, it's possible that FreedomLink hot spots may be deployed in markets outside the company's territory.

Will you need to be an SBC customer to use the FreedomLink service?

No. The service will be available to all consumers.

How much will FreedomLink cost?

The FreedomLink service will be offered at attractive prices, which will be announced when the service launches. The pricing will reflect the company's bundling strategy – customers will receive the best pricing if they also subscribe to other SBC services such as SBC Yahoo! DSL and SBC Total Connections.

Wi-Fi TERMS

3G: Third generation wireless technology, which promises high-speed connections between 128 Kbps to 2 Mbps. Analog cellular is the first generation and digital PCS is the second generation of wireless technology.

802.11b: A standard for wireless Internet access that offers connection speeds up to 11 megabits per second (Mbps) between the access point and Wi-Fi enabled devices.

802.11g: A new standard of wireless technology that provides faster connection speeds, up to 54 Mbps.

Access Point: A location where a Wi-Fi signal originates or is received.

Bandwidth: The amount of information that can be transmitted in a given period of time over a wired or wireless network. Bandwidth is also expressed as bits (of data) per second, or bps.

EDGE: Enhanced Datarate for Global Evolution, or Enhanced Data for GSM Evolution, transmits multimedia content to mobile phone and computer users at speeds up to 170 Kbps. Cingular Wireless is the first mobile phone operator to deploy EDGE as an enhancement to its GSM/GPRS data network.

GPRS: General Packet Radio Services send information across a mobile telephone network at speeds up to 114 Kbps, almost three times faster than dial-up Internet speeds.

GSM: Global System for Mobile communication is a high-quality mobile telephone network that provides voice and data services such as text messaging and roaming capabilities across the world.

Hot Spot: Another name for an access point in public locations such as airports or hotels where a wireless signal for a high-speed Internet connection originates.

Network Interface Card (NIC): A device installed in a computer that can connect to a wireless network. For FreedomLink Wi-Fi access, NIC cards must be compliant with the 802.11b or 802.11g standards. Many new wireless devices are sold with Wi-Fi cards already installed.

Roaming: Roaming agreements between Wi-Fi providers enable customers to obtain service from another provider's hot spot, usually for a nominal charge.

T1 Connection: A high-speed Internet connection, mostly used by businesses, that carries data at a consistent speed of 1.54 Mbps for uploads and downloads. These lines are sometimes used to connect a hot spot to the network.

Unlicensed spectrum band: Radio frequencies set aside by the Federal Communications Commission (FCC) for wireless use by the public.

VPN: A Virtual Private Network provides remote users working away from the office with a secure Internet connection to an organization's network.

Wi-Fi Alliance: An international nonprofit association formed to certify standards and compatibility of wireless Local Area Network products.

Wi-Fi: Short for Wireless Fidelity, Wi-Fi is the popular term for the technology that enables you to connect to the Internet at broadband speeds without using wires.

WLAN: Wireless Local Area Networks enable users to connect to a local area network (LAN) through a connection using wireless access.

WEP: Wired Equivalent Privacy helps protect wireless users when transmitting data between their laptop and hot spots. WEP encryptions are available in 64-bit or in 128-bit encryption modes. The 128-bit encryption is the stronger security mode.

SBC Communications Inc. (www.sbc.com) is one of the world's leading data, voice and Internet services providers. Through its world-class networks, SBC companies provide a full range of voice, data, networking and e-business services, as well as directory advertising and publishing. A Fortune 30 company, SBC is America's leading provider of high-speed DSL Internet Access services and one of the nation's leading Internet Service Providers. SBC companies currently serve 57 million access lines nationwide. In addition, SBC companies own 60 percent of America's second-largest wireless company, Cingular Wireless, which serves 23 million wireless customers over its nationwide voice and data networks. Cingular was the first company in the United States to commercially launch EDGE technology. Internationally, SBC companies have telecommunications investments in 22 countries.

