

Content anywhere, any time

Using various Wireless protocols, each of which frees us from the need for wires, content is becoming accessible anytime, anywhere. First of all at home, where most vendors are offering a range of products designed for content sharing and accessibility in all the rooms around the house. This technology is most frequently implemented in a client / server architecture, and applies to the entire range of domestic audio, video, and photography products. We should point out Samsung's Digital Media Server (DMS), which is DLNA compatible and includes a wireless 802.11g interface. All DMS clients (Digital Media Players or DMPs) can access the various types of content as well as the Internet via this server.

The Philips SLA5520, one of the most recent additions to the company's range and based on Streamium technology (content distribution over IP), lets you play music from your PC hard disk via its Wi-Fi link. It also lets you play music via the Internet on different partner radio sites. Note that Streamium also supports video and photo content.

LG presented the wireless Home Theater LHW 9650 TA, including a Home theater whose speakers no longer require wires. LG also displayed a wireless 15" LCD screen with the viiv (Intel) label.

We are heading to the fully-wireless era. A few standards are missing, however, such as WiMax which was not a big hit at the show this year, or Wifi 802.11e, ratified in early December by the Wi-Fi alliance and intended to carry Video/Audio/Data, but there were no announcements or prototypes at the show.

Our homes and equipment will finally be freed from the distance limitations of cables.

Wi-Fi everywhere

Wi-Fi is omnipresent, from cell phones that switch between GSM and Wi-Fi modes in order to connect using VoIP, to PDAs and portable MP3 players, not to mention Medias Centers.

Medias Centers and all their peripherals use it to access content from anywhere in the home.

Moreover, in most domestic applications, Wi-Fi will get a breath of fresh air in 2006. Based on 'Meshed Wi-Fi' technology, a city like Philadelphia has announced complete urban coverage for this summer. If this kind of enterprise is successful and expands across the US, mobile phone operators may start to wonder about their business model.

Another advantage of this technology: besides communications, it provides geolocation using WPS (Wi-Fi Positioning System) that is more accurate than GPS and well suited to certain value-added applications. GPS devices, which were also well represented at the show, may face competition from this type of technology in the future.



"... lots of mature technologies ... new usage on the horizon..."

Michel Boukhobza
Managing Director C2M Consulting

CES Direct

WISAIR Demonstrates USB wireless

On the Wimedia Alliance booth, WISAIR demonstrated a reference platform for developing USB Wireless using UWB.

This system, including one adapter for the client and another for the host machine, gives vendors of consumer electronics devices the means to develop products using this standard.

The platform also offers very good performance in noisy environments, and can peacefully coexist with Wi-Fi or Bluetooth networks.

BLUETREK Presents a Bluetooth headset

This headset, called X2, is water resistant, making it ideal for outdoor use. Using the Bluetooth 1.2 standard, the headset provides 14 hours autonomy in use and 500 hours in standby.

STACCATO Provides chips for UWB

Staccato (based in San Diego) is part of the Wimedia Alliance. It makes chipsets (single chip CMOS) enabling peripheral manufacturers to implement Wireless USB compatible devices.

The company manufactures a series of components covering all UWB frequency ranges.

Bluetooth Technology

This technology, which is now clearly established, enables short-distance data transmission. It uses a radio standard basically intended to replace the cables that connect terminals. Bluetooth operations are based on several basic principles.

First of all, it works over an unreserved frequency range at 2.45 GHz called the ISM band (Industrial-Scientific-Medical). Next, it concerns short-range wireless links (between 10 and

30 meters - 30 to 100 feet) at medium transfer rates (720 Kbps/s for version 1.2 and 3 Mbps for version 2.0 EDR). It is based on highly miniaturized components with very low power requirements that can be built into a wide range of devices (cell phones, PDAs, portable computer, and eventually domestic and industrial equipment). Bluetooth is also at the origin of Wireless Personal Area Networks (WPAN).

The Bluetooth standard has already gone through three major revisions (1.0 in 1999, 1.1 in 2001, able to transfer data as well as voice traffic, and finally 2.0 EDR (Enhanced Data Rate) in 2004).

The major improvements of the last version include an increased data transfer rate, lower power consumption, and better autonomy.

The goal of the new specification is to develop new

applications within the WAN such as streaming audio, file transfers, or printing documents.

In order to resist piracy, Bluetooth will reinforce its encoding by setting up longer alphanumeric codes (255 bits instead of 7 today). This technology is known as the 802.15.1 standard, and version 802.15.3 is currently being developed.