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The Nokia Digital Home Story

What is Nokia Digital Home?

The digital home is currently one of the most exciting trends in the consumer electronics industry. The increasing consumption of digital content, such as music, photographs, and video, on a variety of different consumer electronic devices coupled with new connectivity solutions such as WLAN (wireless local area network) is ushering in a revolution in how we consume digital content – both out and about and inside our homes. And Nokia aims to be at the forefront of developing the networked home by providing solutions that introduce mobile handsets to the digital home offering.

Nokia's vision is that people will quickly and seamlessly be able to enjoy access, manage, share and store their digital content on a variety of devices within the home. Nokia mobile devices will be fully interoperable with your PC, home music system and television. So you can play music stored on your handset over your home stereo, view photographs stored on your phone on your television and transfer files between your PC and mobile device. At the same time, mobile devices provide a unique ability to take your favorite content wherever you go.

The first interoperable digital home devices from Nokia and other leading consumer electronics manufacturers will be available to consumers during 2006.

The Booming WLAN Market

While the digital home will feature a mixture of wire and wireless connections, it is the surge in home WLAN networks that is driving this area. According to Jupiter Research there will be 34.3 million wireless home networks in the US in 2009. And in a recent study by the European Interactive Advertising Association (EIAA) it was revealed that 16% of European households currently have a WLAN connection.

At the same time we are seeing an increase in the number of devices that feature WLAN. The vast majority of PCs and laptops now have Wi-Fi certified WLAN as standard while Nokia's product range currently features eight Wi-Fi enabled mobile devices: Nokia N92, Nokia N91, Nokia N80, Nokia 9500 Communicator, Nokia 770, Nokia E60, Nokia E61 and Nokia E70.

The UPnP industry standard makes it possible for different devices to connect to each other over a WLAN connection with no pre-configuration (see below).

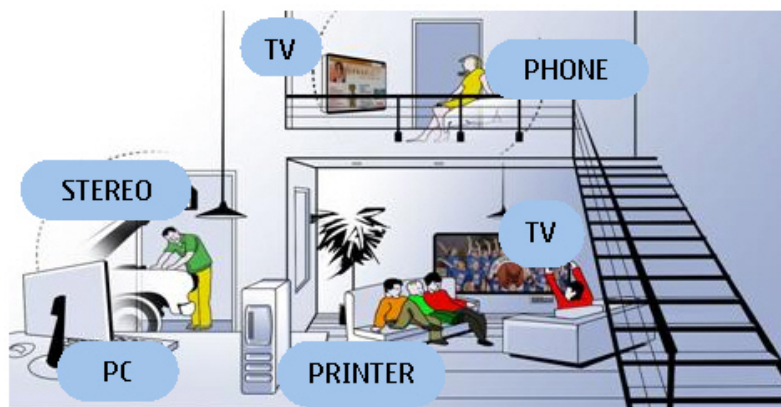
November 2, 2005

Digital Home of the Future

The digital home of the future will feature a range of products all connected seamlessly together either by wire or wireless connections. Mobile devices will play an important role in the digital home and Nokia's vision is that its devices will interconnect and complement other consumer electronic devices within the home.

The digital home will feature:

- Television – accessed via media link devices
- Home stereo – accessed via media link devices
- Personal Computer
- Printer
- Home telephone
- Mobile handset
- Other portable devices



The Digital Home & Your Mobile Device

Nokia's range of multimedia devices let you both capture digital content while on the move and enjoy your favorite music, photographs and video clips while away from home. The digital home means that you can easily synchronize your mobile handset with other entertainment devices in the home to enjoy, manage and share digital content. For example:

- Download your current favorite music (or images & videos) from your PC to your mobile device
- Store images, videos and music held on your mobile to your PC

November 2, 2005

- Play songs loaded onto your mobile device over a home stereo speaker system
- Print directly from your mobile device
- Upload images held on your mobile device onto the Internet using your home Internet connection

Benefits for Consumers

Interoperability between devices is going to revolutionize the way people enjoy digital content in the home and on the move. Being able to easily transfer and store all your favorite content on your mobile device means that you'll always be in a position to show friends your latest photos and let them listen to your current favorite music tracks.

- Zero configuration makes it quick and easy to connect devices together
- No more wires are needed to connect devices
- Convenience & usability when it comes to managing your home media network and its media (music, photographs, and videos) content
- Speed – it will be much faster to access other home networked devices and the Internet as well as print directly from your mobile device compared to connecting via a PC

Benefits for the Industry

Integrating mobile devices into the digital home network has important implications for retailers, handset manufacturers, and for the consumer electronics industry:

- The digital home creates a whole range of new bundling opportunities for both mobile retailers and traditional consumer electronics retailers. Imagine offering consumers a complete networked digital home package with TV, stereo, PC and mobile device!
- For mobile manufacturers, the digital home brings smartphones into the 'media family'. By making it easier for people to manage and transfer digital content between devices, the industry can further encourage the use of multimedia functions on mobile handsets
- For the consumer electronics industry, inter-working with mobile devices enables the creation of completely new device categories and adds value to existing product categories such as TVs or stereo systems

November 2, 2005

The Technology Behind the Nokia Digital Home

The key technology involved in making the digital home a reality is Universal Plug and Play (or UPnP). This is an industry standard that enables automatic discovery and remote control of devices. A UPnP-enabled device can dynamically join a network, obtain an IP address, convey its capabilities and learn about the presence and capabilities of other devices.



UPnP is a key building block of the Digital Living Network Alliance (DLNA) home specification and an important first step in facilitating easy interoperability between devices. Nokia is an active player in the DLNA and very much involved in the development of the DLNA 1.5 guidelines which will further enhance the interoperability between devices through enabling a better experience when sharing and managing the digital content within the home network.

Nokia Wi-Fi Enabled Devices

Nokia currently has eight Wi-Fi certified WLAN devices within its product portfolio: Nokia N92, Nokia N91, Nokia N80, Nokia 9500 Communicator, Nokia 770, Nokia E60, Nokia E61 and Nokia E70. Of these, the Nokia N80 is the first device to support UPnP, a feature that will be introduced to a growing number of future Nokia products.



For more information, please visit:

www.nokia.com/n80

www.dlna.org

www.upnp.org

www.wi-fi.org