



PIMC develops HomeNet2Run server

The HomeNet2Run project: Accessing media from everywhere in your home

People use various networks in their home: the power network, the cable network, the internet connection. These networks use different technologies and connections so a total solution for home networking would be favoured.

In a HomeNet2Run environment, people can access their music, movies, pictures from any room and even from outside their house. The leading brands in Consumer Electronics will show you the efforts of their joint venture towards the 'interconnected' home.



The challenges:

The first challenge was to physically connect the existing devices onto a single network. The HN2R consortium has developed 'bridges' between the different home networks e.g. IEEE1394 and Ethernet. Thanks to these bridges, people can connect their devices all around the house to one single 'network'.

The second challenge was to make normal consumer electronics devices such as television sets, CD-players, radios share their content with the PC platform. Through the HN2R solution, we can now have a seamless access to services from the broadcast, internet and communication worlds.

In summary, HomeNet2Run searched for possibilities to provide the Consumer Electronics industry with solutions that will enable room-to-room and home-to-home connectivity of consumer electronics and computer devices. These solutions will give the consumer the freedom to enjoy their content in their home in any way that they want.

The PIMC server:

The PIMC server plays an important role in recognising the different devices in the HN2R environment through UPnP (Universal Plug and Play) and controlling them through a web-based user interface.

The 4 elements of the Home Server:

UPnP Control Point Engine:

First, the home server functions as a UPnP Control Point Engine. This enables the server to detect the UPnP devices in the network. After detecting the devices, the Home Server provides a Control Layer for eventing, state-variables and actions of the different devices.

UPnP Devices:

The Home Server will also provide the

1. UPnP storage (MP3)
2. UPnP front-end for following devices:
(Tuner, renderer, hard disk player and hard disk recorder) for the network and the different devices.

Web Module:

The next step for the Home Server is to manage the communication with the Control Point Engine. To do this, the Home Server generates a web-interface dynamically. This interface is the basis for the last part controlled by the server being the User Interface.

Web-based Interface:

The User Interface supports some key functions such as:

- * Authenticate users
- * Manage the specific profiles of these users
- * Control the UPnP audio devices
- * Create audio playlists
- * Control UPnP Video devices
- * Manage the UPnP MP3 storage

With this contribution in our first European ITEA project, PIMC plays an important role in finding a solution for the integration issues on networked consumer electronics. The project allows PMTC, the testing division of PIMC NV to gain in-depth knowledge in the area of consumer electronics & interconnectivity standards & implementations. This will allow PMTC to provide improved testing services for these new technologies.

HomeNet2Run at IFA 2003:



IFA is the world's largest consumer electronics exhibition. For six days, IFA opens its doors to European retailers, interested consumers, and the media. IFA is aimed at industry insiders as well as the general public. Thanks to its unique experiential approach, IFA guarantees efficient marketing communications. IFA is also regarded as the leading international ordering platform.

The consortium will take part in the IFA 2003 (Berlin, 29th August - 3rd September) where the demonstration of the HomeNet2Run will show that a home with a network offers many opportunities for a wide range of new combinations of previously distinct broadcast, internet and communication services.

The HomeNet2Run partners are convinced that jointly providing an architecture for the 'interconnected' home is a large step forward. Being equipped with competitive technology will put the European industry in a good position in the digital age.

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