

Terminal, Software Technologies

Terminal technologies for ubiquitous services and software technologies related to solution businesses.

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A Rich Communication Environment Using Home Electronics

NTT Cyber Solutions Laboratories

Overview

As use of NGN becomes widespread, phone numbers will be used for rich communication that includes video and data as well as voice calls. The interworking of handy and familiar home electronics and other such devices provides a simple environment for achieving such rich communication. Our research is based on actual lifestyle scenarios and involves first establishing a signaling system, followed by specification of a Teleservice^{*1} for securing mutual connections between terminals for media (voice, video and data), and device interworking technology for easy provision of rich communication through the interworking of devices in the home.

Features

- Voice, video and data communication is possible with multiple interworking devices
- Voice, video and data can be transferred between interworking devices
- Digital content can be sent and received using phone numbers
- TTC^{*2} specifies the Teleservice, which enables file transfer and video communication between terminals on NGN
- Specification of a method for achieving communication through interworking of devices using UPnP^{*3} implemented with home electronics (UPnP FORUM: Telephony:1)

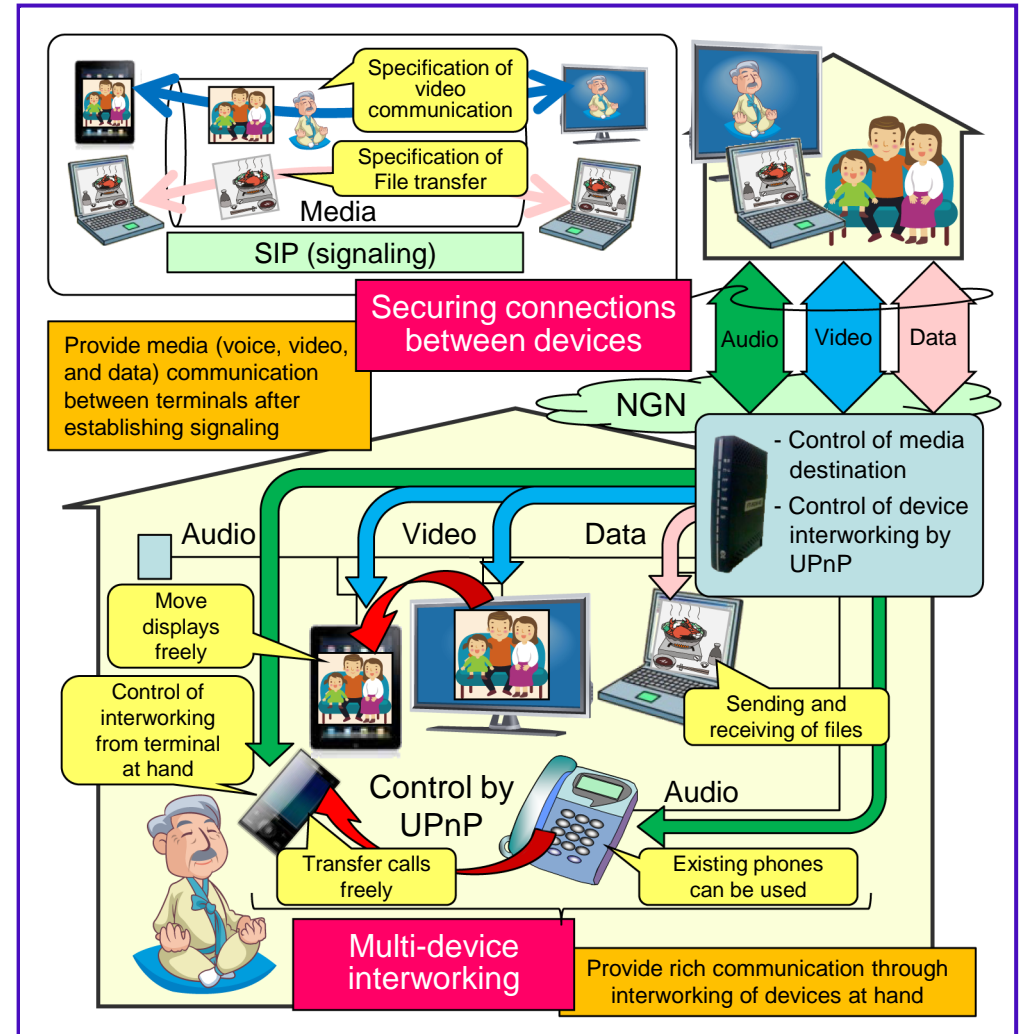
Application scenarios

- Communicate with relatives far away while sharing video and pictures, etc. via phone numbers
- Send and receive voice, video or data freely from the living room, study or other places in the home
- Describe products while viewing catalogs during a call
- Advising while looking at test papers such as giving corrections for distance learning, etc.
- Send color documents or materials via phone numbers, like FAX

*1 Teleservice: Decision on interchanging terminals within the communication path for media communication after the start of communication

*2 TTC: Telecommunication Technology Committee

*3 UPnP: Universal Plug and Play



Techniques for PWR (Personal Wireless Router)

NTT Access Network Service Systems Laboratories

Overview

PWR is a portable wireless cognitive router produced by NTT Broadband Platform, Inc. The unit has a compact chassis and is battery driven. PWR provides Internet access via 3G, WLAN, etc., and it automatically selects the most suitable wireless medium to connect WLAN terminals, such as laptop PCs and gaming devices, to the IP network. NTT Laboratories helped in the development of PWR by investigating how to make automatic selection of the most suitable network interface for maintaining communication quality and by conducting evaluations and field tests of the unit.

Features

- Techniques of interface selection
 - Suitable interface selection from various available network-side interfaces
 - Suitable radio channel selection of the terminal-side wireless LAN
- Techniques for lengthening operation time
 - Standby function when there are no active WLAN terminals
 - Interface control (Intermittent access points scan, inactive interface sleep, etc.)

Application scenarios

- General users
 - Music downloads, podcasts, etc., while on the move
 - Web browsing, network gaming, etc., in a café
- Business users
 - Access to a company's network at a hotel without LAN equipment
 - Temporary wireless LAN environment at a construction site, etc.

