



Technologies for Spontaneous Systems

Spontaneous systems arise from the natural human need to spontaneously communicate with other people and machines--anywhere and anytime over legacy and dynamic ad hoc networks.

In today's modern world, telecommunications systems cannot really communicate with each other due to a multitude of technologies and standards. The natural characteristic of a human user to behave spontaneously is the key to future spontaneous systems.

CHALLENGE

Maximizing the potential of commercial wireless systems to harness efficient real-time communication

Currently, wireless systems are static in nature and only the last or first hop to the end-user system is wireless. In ad hoc networks, wireless media is applied between devices that establish the dynamic network. Communication between devices is supported over some other intermediate devices by means of the multihopping function. When a device in the network connected with any other device, session management is required to enable end-to-end communication. If a device needs to provide services, some technologies are required to enable smooth service configuration.

KEY SOLUTION

1. Plug and play installation. *Interface bundle is plugged in and installed automatically.*
2. Encapsulation of service features into the networked appliance (NA) proxy, which contains the driver and user interface of the NA (NA UI). *When interaction between remote terminal and NA is requested by the user pointing action, the NA UI is then transferred over the remote or local connection into the user terminal in the form adapted into the user context.*

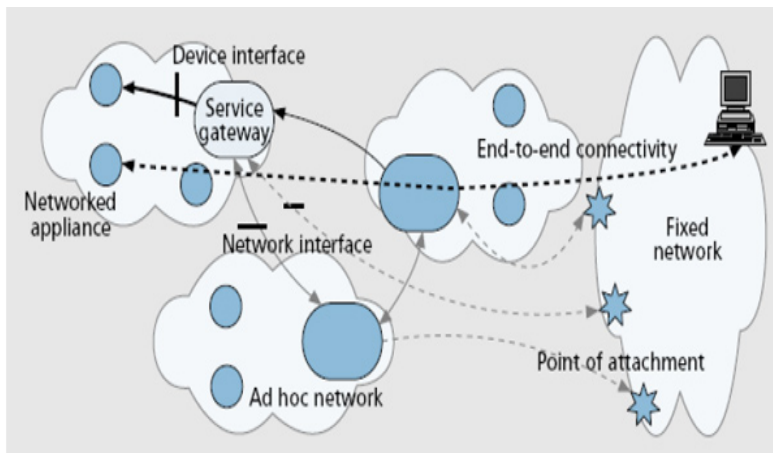
VTT produces research services that enhance international competitiveness of companies, society and other customers at all stages of their innovation process, and thereby creates the prerequisites for growth, employment and wellbeing.

VTT promotes the realisation of innovative solutions and new businesses by foreseeing the future needs of its customers already in strategic research.

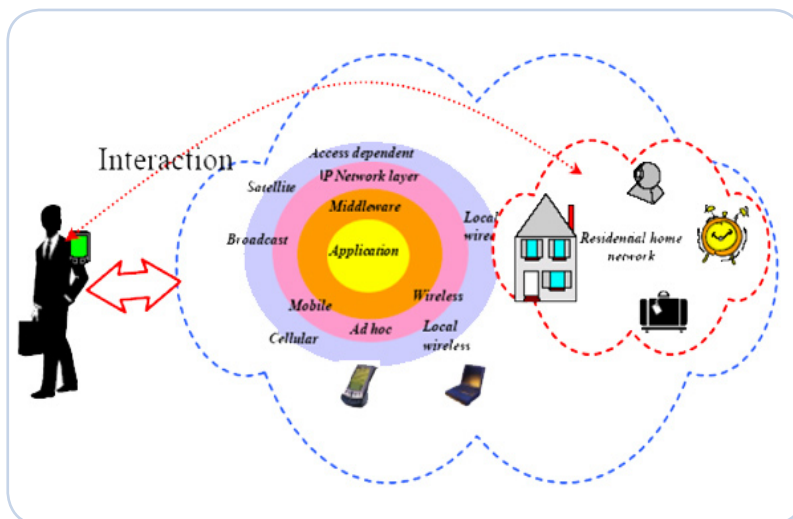
With its 2,700 employees, VTT is the largest research organization in Northern Europe. VTT's Ventures operation creates profitable and growing technology and wellbeing as well as more effective use of VTT produced Intellectual Property Rights.

Technologies don't talk but human beings do

- Capabilities of the devices to be controlled may be limited
- Device-specific control interface may be needed
- Control may be required to adapt and personalize according to the user needs and context
- Interaction with the device using a mobile lightweight terminal and either proximity-based wireless connection or remote connection over network



Basic elements of a spontaneous system



Interaction of all IP Mobile Internet Devices with Networked Appliances in a Residential Home

OUR INVENTION IS YOUR BUSINESS OPPORTUNITY

Technology Summary

Controller and its control interface
FI-19992808, International Patent
Applications Pending

Competitive Benefits

Companies, organizations, and individual households dealing with a vast amount of different communication needs may benefit from spontaneous systems. Second, this technology enables the user(s) to connect to multiple technologies and networks together in a seamless and easy (plug-and-play) manner. Finally, mobility is possible—users can for example, move freely with a variety of electronic devices at hand whether in the offices or homes.

Available for Licensing

VTT offers exclusive and non-exclusive license depending on the technology partner.

Contact

Mika Naumanen
Business Development Manager Ventures
P.O.BOX 1000
FI-02044, VTT, Finland
Tel. +358 20 722 4771
GSM +358 40 5360868
Fax +358 20 722 7090
mika.naumanene@vtt.fi

