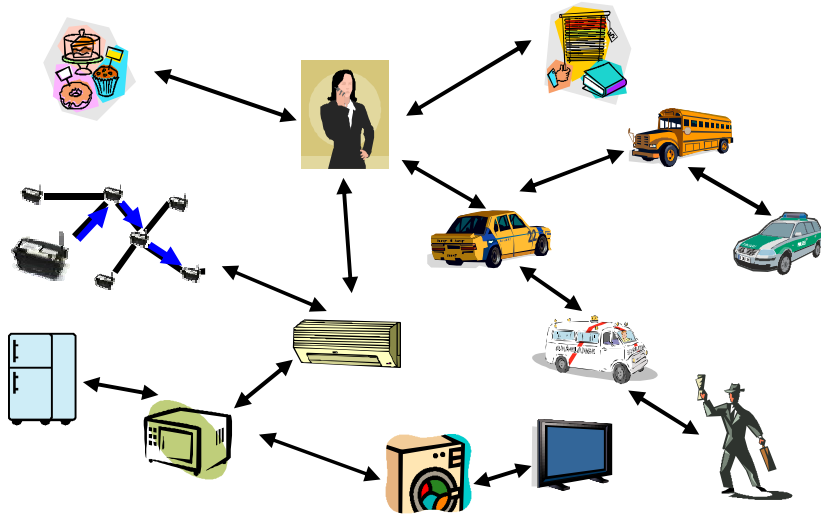
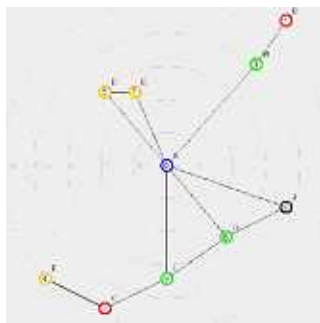


Research and Development of Ubiquitous Network Communication Technology

Professor Akio Koyama



Ad-hoc communication for ubiquitous networks.



Visualization for ubiquitous networks.

Content:

A ubiquitous service is one of main services for Next Generation Networks (NGN). By development of the ubiquitous technology, the number of mobile terminals which are connected to networks such as PCs, cellular phones, RFID tags, sensors, information appliances, in-vehicle terminals, autonomous robots, wearable terminals and so on, is predicted to be 100 million in 2005, to be 10 billion in 2010 and to be 1 trillion in 2015. For such increasing mobile terminals, it is necessary to develop high effective and high trust communication technologies, and the low power consumption protocol for realizing communications among terminals. Furthermore, it is necessary to develop a visualization technology and application technology for the networks.

In our laboratory, we carry out the research of network protocols (mainly routing protocols and MAC protocols) and the visualization technology for realizing the ubiquitous networks. Moreover, as the research of the application system, the research of a ubiquitous health monitoring system and an object oriented communication system are carried out. In the future, we will plan to combine to our developed protocols and application system.

Yamagata University Graduate School of Science and Engineering
Research Interest : Computer Networks

E-mail : akoyama@yz.yamagata-u.ac.jp

Tel : +81-238-26-3577

Fax : +81-238-26-3577



HP : <http://elfgw.yz.yamagata-u.ac.jp/lab/index.html>