

The IPv6 based PDA-type dementia monitoring system

Introduction

- ❖ In proportion to the increase of the old, welfare for the aged led to a grave social issue.
- ❖ Specially, in case of dementia patient whom management and protection are asked to for 24 hours, a number of a patient increases, but welfare facilities are very insufficient.
- ❖ Because the family who cannot manage a dementia patient for 24 hours increases like a nuclear family, the system that can monitor a patient in the outside is asked.

Why must we use the IPv6 based PDA-type dementia monitoring system?

**Anytime,
anywhere, I want
to monitor state
of a dementia.**

**Now, we must
establish IPv6-
based mobile
technology.**

**Windows CE 4.0
supports IPv6.**



Operating Procedure of the System (1)

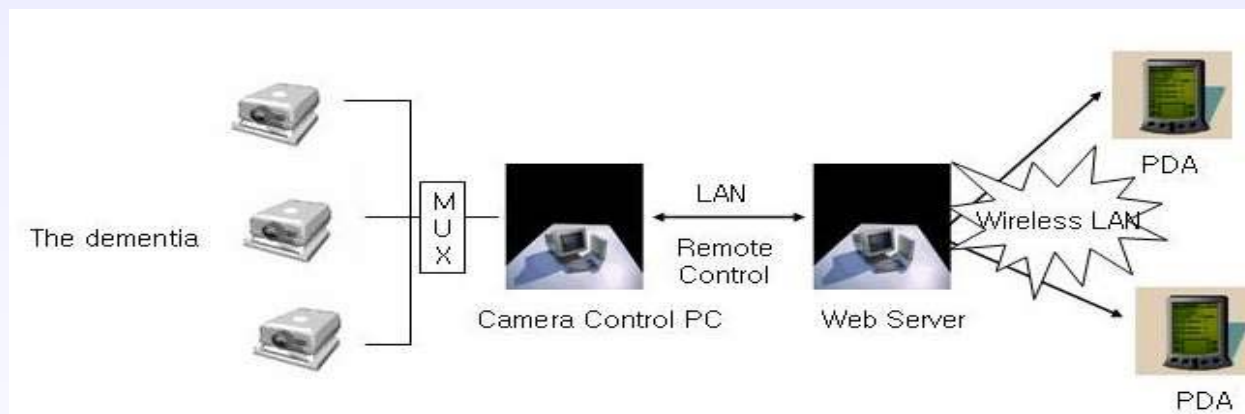
Method

- ❖ We developed a system for a dementia state monitor in a wireless LAN (local area network) environment.
- ❖ PDA used a Motion JPEG method and displayed (320*240) state of the dementia.
- ❖ Camera control PC included a capture function to have been made from Web Cameras and MUX.
- ❖ The image stored in Camera control PC was transmitted to Web server through LAN. Then, the image was transmitted from a web server to PDA through a wireless LAN(IPv6 based).

Operating Procedure of the System (2)

Procedure

- ❖ Install a Web camera connected to PC in residence station.
- ❖ Web camera photographs state of a patient by a real time.
- ❖ Image is transmitted to Web server on a storage with a JPEG file.
- ❖ Image is transmitted from a web server to PDA through IPv6 based wireless LAN.
- ❖ We are able to check a movement of a patient through PDA.



Expected Benefits of the System

Benefits

- ❖ **Using mobility of IPv6, the application can be applied to the mobile communication environment.**
- ❖ **We can quickly cope with a danger situation of a patient with using this system.**
- ❖ **With the development of the home network facilitated by IPv6, a monitor system like this will be essential for future lives.**