# The IPv6 based PDA-type dementia monitoring system

#### Introduction

- **❖**In proportion to the increase of the old, <u>welfare for the aged</u> 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?

Now, we must establish IPv6-based mobile technology.

Anytime, anywhere, I want to monitor state of a dementia. Windows CE 4.0 supports IPv6.



# **Operating Procedure of the System (1)**

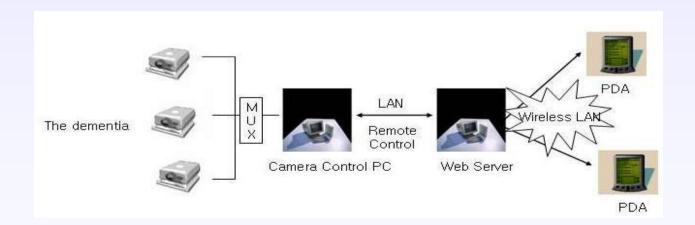
#### Method

- **❖** 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.