Aspects of a messages-bus based communications framework in multimodal and multi-device environment to support independent living of elder people

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Abstract

This presentation will cover aspects establishing communications framework in multi-modal and multi-device environment that support independent living of elder people. This environment is studied and constructed in EC FP7 project called "MOBISERV". Project will create software solutions for many functionalities that will aid elder people in their daily living, like nutrition, social and health-care support. The software will be deployed into different devices, like autonomous robot, wearable health signal sensor system, image recognition and home automation. The environment will have multiple modalities in daily operation. Number of operation modalities and types of devices will set interesting challenges to design and implement a communications framework.

The distribution architecture in the communications system will be based on message bus approach. The system will be employ wired and wireless (WLAN, Bluetooth) communications medias in a very dynamic manner. Also software composition in integration is targeted to be open. Thees aspects and benefits and drawbacks towards the communications message-bus approach will be covered in presentation.

Index Terms: Message bus, Multi-modal, Distribution architecture.